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Address.

THE NATURAL METHOD OF TEACHING THE SUBJECT OF MEDICINE.*

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There are three great groups of studies in the medical school. The first includes the mechanism of the normal body; the second, a knowledge of the abnormal; the third, a knowledge whereby deviations from the normal may be prevented and rectified.

To become acquainted with the structure and functions of the normal body, the student spends two or more years in the laboratories, and this part of his work has, within the past quarter of a century, not only increased enormously, but a complete revolution has been effected in the methods of instruction. Much more difficult is it to give to the student a thorough training in the other great groups of studies, and I think among teachers there is a feeling that the work along these lines has not progressed quite so satisfactorily as it has in the subjects embraced in the first group. I wish to tell a plain tale of the method of teaching medicine at the Johns Hopkins University. There is nothing very novel about it, except that in the third and fourth years the hospital is made the equivalent of the laboratories of the first and second; and in it the student learns the practical art of medicine. This may be called the natural mode of teaching the subject.

Ask a practitioner of twenty years standing how he has become proficient in his art, he will reply, by constant contact with disease; and he will add that the medicine he learned in the school was totally different from the medicine he learned at the bedside. The graduate of a quarter of a century ago went out with little practical knowledge, which increased only as his practice increased. In the natural method of teaching the student begins with the patient, continues with the patient, and ends his studies with the patient, using books and lectures as tools, as means to an end. The student starts, in fact, as a practitioner, as an observer and repairer of disordered machines, with the structure and orderly functions of which he is perfectly familiar. A mechanism of astounding perplexity, the human body is subject to so many accidents and derangements that no worker, however skilful, can deal with all, and the apprentices can only know well a few of them, but he can learn principles of action, and can be taught how to repair the more important of the disorders to which the machine is liable.

Novel conditions confronted us in planning the work of the Johns Hopkins Medical School. The physiological and pathological laboratories had been organized for many years, and the hospital had been open for four years before the school proper was established. The students were carefully selected, having had a previous training in the sciences. Most helpful of all, there were no traditions to consider in arranging the curriculum, which as laid down by the University, embraces a three years' preliminary course (in which the sciences and modern languages are the main subjects), followed by a four years' medical course, the first two of which are devoted to anatomy, physiology, pharmacology, physiological chemistry and pathology, and the third and fourth to the subjects of medicine, surgery, obstetrics and the specialties.

A word first as to the general arrangement of the department of medicine. The personnel consists of a professor, who is ex-officio in charge of the medical department of the hospital, an associate professor, and a corps of instructors and assistants. The number of beds in the medical wards ranges from 100 to 125, and there is a large out-patient department. There are eight resident physicians on the medical staff, four appointed annually from the graduating class as internes, and four seniors, more or less permanent; the first assistant (the associate in medicine), upon whom devolves the main responsibility of the service in the absence of the professor; the second assistant, who has charge of the private patients and helps in the ward teaching; the third assistant, who has charge of the clinical laboratory and takes the class in clinical microscopy; while the fourth assistant is bacteriologist to the service and has charge of the isolation ward. These senior assistants are encouraged to remain as long as possible, and they are most essential factors in the scientific work and in the teaching. The out-patient medical department is in charge of the associate professor, with a corps of instructors and assistants.

The work of teaching is conducted in the following manner:

I. PRELIMINARY INSTRUCTION IN NORMAL DIAGNOSIS.

As a teacher can take nothing for granted in a medical student, there is given in the last term of the second year a brief preliminary course, dealing with the application of anatomy and physiology to practical medicine, more particularly with reference to the heart and lungs. The student is instructed how to study the sounds of the heart in health, and the characters of the respiratory murmur, and the anatomical relations of the organs to the surface markings are carefully considered. While instruction of this sort really belongs to anatomy and physiology, there are advantages in having it taught with clinical application, so that the associate professor of medicine, Dr. Thayer, holds these demonstrations and practical exercises.

II. THE WORK OF THE THIRD YEAR.

We take as our motto the old maxim: "The whole art

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of medicine is in observation." The work consists in, first, the training of the senses in the observation of disease; secondly, courses in physical diagnosis and clinical microscopy; and, thirdly, practical work in history taking, fourthly, the general medical clinic in the amphitheater.

(a) The Observation Class.—The student must first be taught to observe and can not do better than begin his acquaintance with disease among out-patients. A man with typhoid fever in bed, scoured and cleaned, looks very different from the poor fellow who totters into the dispensary. Connected with the examining rooms of the out-patient department is a large room, in which a class of seventy-five can be easily accommodated. Here at 12 o'clock on three days of the week is held what we call an observation class. Three or four cases are examined in the hour by students taken in rotation. The student asks the questions, repeats the answers and makes the examination. He is taught to use his senses in a simple and orderly manner. The seeing eye and the feeling finger are products of long training. How to see and what to see, how to touch and what to touch constitute the main lesson of the hour. Locke well remarks: "Nicely to observe the history of diseases in all their changes and circumstances is a work of time,

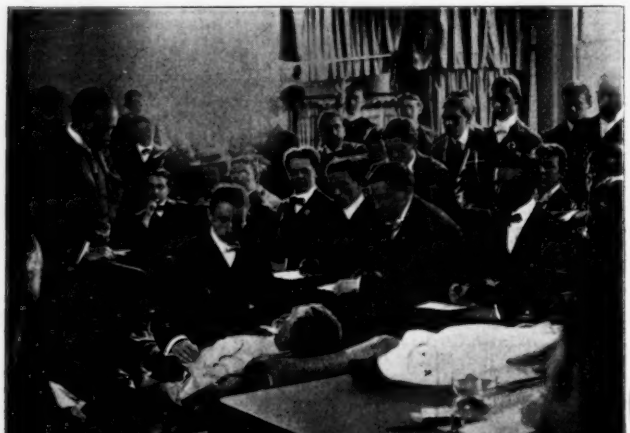

Figure 1.

accurateness, attention and judgment." A diagnosis is not always reached, and the treatment is not necessarily discussed. The important point is a study of the objective features of the case. Fig. 1 illustrates this class in session. Fig. 2 is from a photograph of the class-book giving the work during part of the month of January. To teach the student to follow the natural history of disease is most essential; a case is not shown to-day and dismissed finally, but I insist that the student shall follow it to the finish. For this purpose each day I begin with a routine question: What have you to report on your cases? Usually four or five minutes are taken in statements relating to patients who have been before the class. A good number of the cases, as you see by one of the columns on the chart, go to the wards, where the students have the privilege of visiting and watching the progress. In cases which return to their homes, the student is encouraged to make a visit at least once a week, or when, as often happens, the patient lives out of town, a correspondence is begun. At the end of each month there is a clinical "round-up." The student whose turn comes, analyzes the material of the month, arranging it systematically. At the end of the session the eight students who have given the monthly "round-ups" meet and make a general report, which is read on the last day of the class. I pass around the book of the last session, which will give you a very good idea of the work, and I give here the following summary:

Cases, 230; deaths, 15; mortality, 6.5 per cent.

	Cases.	Deaths.
1. Specific infectious diseases	61	6
2. Diseases of the digestive system	35	7
3. Diseases of the respiratory system	21	0
4. Diseases of the circulatory system	32	1
5. Constitutional diseases	17	0
6. Diseases of blood and ductless glands	20	0
7. Diseases of kidney	5	1
8. Diseases of nervous system	22	0
9. Diseases due to animal and vegetable parasites	4	0
10. Diseases due to Intoxications	6	0
11. Pregnancy	1	0
12. Anatomical and pathological curiosities	6	0

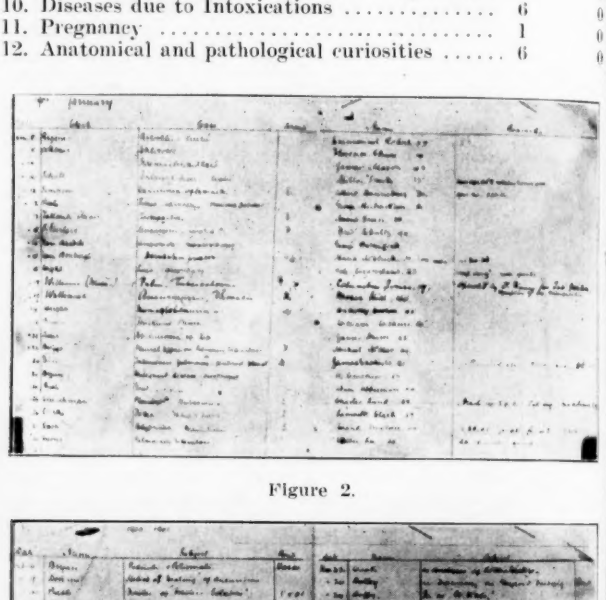

Figure 2.

Figure 3.

To get the student into the habit of following the cases is most important, and it adds very much to his interest in the work. In connection with this observation class we unite a certain amount of elementary training. For example, there is a dictionary on the table, and if the meaning of a word is doubtful, if the derivation is needed, or if the pronunciation is wrong the student is asked to look it up for himself. He is also made to help considerably in the teaching by reporting upon certain subjects. Fig. 3 illustrates some of the questions which have been set this session. In the report lucidity and brevity are regarded as the essentials. In looking up the literature of a subject I refer the student either to the "Index Catalogue" or to "Neale's Digest," or very often I give him specific references to the literature. If a book is not in the Library of the Medical School, or in that of the Medical

and Chirurgical Faculty, the librarian sends for it from the Surgeon-General's Library. Two purposes are served: 1, the student is taught how to study a problem in the literature, and he has a chance, if he wishes, to show what he can do with his tongue or pen in presenting the subject; and, 2, both students and teachers often get most useful information. For example, I had never seen nor read the original description of either Basedow or Graves on exophthalmic goiter until a third-year student presented the question before the class. I like to have the original descriptions of diseases presented in this way; Sydenham's account of chorea, Huntington's account of the progressive chorea of adults, Gull's description of myxedema, Addison's paper on the adrenals and his description of pernicious anemia. Bell's account of facial palsy, Colles' law, Corrigan and his cardiovascular relations. For example, not long ago, in prescribing Fowler's solution, I asked a student, who was Fowler? Of course he did not know, nobody else knew, I did not know myself, but last week we had an opportunity of hearing all about him. Then again some of our most interesting reports have related to the use of drugs, as, for example, the history of the introduction of iron into practice; who was Blaud? the composition of the pill that bears his name; the introduction of iodid of potassium into practice. The historical method used in this way has a very valuable place in the class room. I can not too strongly commend to teachers the observation out-patient class for junior students. Not only is the material of the very best sort, but in the long run it is a decided advantage to the patients in a dispensary to be made the subject of instruction for medical students, and, moreover, in an ambulatory clinic the student sees close at hand the unwashed maladies, not the distant prepared and altered picture of the amphitheater. In a class of this sort the patient and the student do the most of the teaching. You will see by the list of diseases that I am not particular; anything will do, so long as it has an educational value. Occasionally a patient comes in whose malady demands a short explanation, but the primary importance of the class is to give the student a practical, objective, first-hand acquaintance with disease.

(b) Physical Diagnosis and Clinical Microscopy.—To train students in the use of instruments of precision is a slow and difficult matter. A large portion of the time of the third year is occupied with the class work in physical diagnosis and clinical microscopy. During the first two terms the associate professor of medicine, Dr. Thayer, with a staff of assistants, drills the class systematically in the use of the stethoscope and the methods of examining the heart, lungs and abdominal organs. Here again the out-patients are used in the large teaching room adjacent to the Dispensary. Special cases are also taken from the wards. Plenty of time, oft-repeated opportunities and intelligent supervision of patient and student are the essentials in teaching physical diagnosis. A valuable addition to this teaching is a course in medical anatomy, given by one of the instructors in the anatomical laboratory.

A necessary adjunct to a modern hospital is the clinical laboratory, in which students can work, and in which they study systematically the methods of investigation of the blood, sputa, urine and secretions. Twice a week from two to four in the afternoon, the third-year class is drilled in these methods by Dr. Emerson, the resident physician in charge of the clinical laboratory. Familiarized thoroughly with the use of the microscope by prolonged laboratory courses in histology and pathology in the previous years, the student is ready to appreciate the modern clinical methods for investigating disease which are so essential in diagnosis. Fig. 4 shows the class at work. I may remark that the clinical laboratory is in immediate proximity to the wards, and has accommodation for about 110 students. As each student has his own place throughout the session and his own microscope, the laboratory becomes in reality what its name indicates, and to it the student goes at his leisure to work at his specimens, or for private research. Conducted properly, with a protracted course and ample material, this class becomes one of the most popular, as it certainly is one of the most useful, in the curriculum.

(c) History-taking.—To take a good history, to take one in a methodical manner, and last, but by no means the least, to put it down in a legible, attractive manner, takes careful training and much practice. In the observation class opportunities are offered which familiarize the student to a certain extent with the methods of procedure, but during the last term of the course groups of students in rotation take the histories of the out-patients, and these are supervised by the corps of instructors. During the summer small groups of the students are assigned for work in the out-patient rooms, and they in this way are able to get additional practice in this all-important art.

(d) The General Medical Clinic.—This part of the work I will describe more fully in a few moments in relation to the work of the fourth year. I may here say that the third-year students participate actively in it. From them the committees on pneumonia and on typhoid fever are selected, and they are sometimes asked to report on special subjects before the class.

In addition to this work in general medicine, we have thought it advisable to place the subject of clinical neurology in the third year. The student comes to it fresh from a very thorough training in its anatomical and physiological aspects and there is no department of medicine in which the practical application of these two scientific branches is more immediate than in diseases of the nervous system. In the neurological dispensary, under Professor Thomas, a very similar method is followed, so that in seeing the work of the clinic twice a week and taking histories they get a very fair knowledge of the more common diseases. Altogether our experience of the past five or six years warrants the conclusion that by this method the junior student is given a good start in the right direction, which, as Plato somewhere remarks, is the chief value of education. The special advantage of the method is that throughout the entire session the student is brought into intimate contact with the patients, and is enabled to familiarize himself quietly, and without any rush or hurry, with the use of the instruments of precision in clinical work. Of course we direct the reading in a certain measure. I encourage them to begin at once to read one of the medical weeklies, and to keep up their French and German by glancing, at any rate, at the *Berliner* or the *Deutsche Medicinische Wochenschrift* and also *La Semaine Médicale* or the *Progrès Médicale*. Sometimes I refer them specifically to a journal article, more frequently to some article in "Allbutt's System," or in "Nothnagel's Handbuch."

III. THE WORK OF THE FOURTH YEAR.

This consists of three distinct parts.

(a) The Clinical Clerks and Ward Work.—The group of fourth-year students, which numbers usually between fifty and sixty, is divided into four sections, each one of which serves for two months in rotation in the medical, surgical, gynecological and obstetrical departments of the hospital, either as clinical clerks or as surgical dressers. Six beds are assigned to each clerk, who is responsible for the history of the case, the daily records, and who personally does all the blood and urine work, or any minor operations that are required in connection with the cases. On three mornings of the week, from nine to eleven, I make the visit in the wards with the clinical clerks. The histories of the new cases are read, the patient examined, questions asked, and in general a Socratic method of instruction is followed. On the alternate days the associate in medicine and first assistant, Dr. Futcher, takes the group of clinical clerks at the same hour, so that they have routine instruction daily in the wards from nine to eleven. It is in the ward, after all, that the student must learn to recognize and to treat disease. The work of the third year is but preliminary and introductory to a routine daily systematic instruction at the bedside. He has an opportunity of watching the cases day by day, of which indeed, under the supervision of the house physician, he practically has charge. The house physician in each ward is also a teacher, superintending the records, helping the clinical clerks in the conducting of examinations, who receive from him in all directions friendly advice and assistance. Cases of typhoid fever or of pneumonia, studied in this way day by day, give to the student that practical acquaintance with disease, in which the very essence of the teaching of medicine consists. Then he has an opportunity, too, of learning all the minutiæ in practice that are so important—the supervision of the tub-bath, the preparation and giving of enemata, the mode of giving medicines, and the study of their action, all these he sees as a part of the routine work.

Figure 4.

I have only one criticism to make. The period of time occupied in medicine is only half as long as it should be, and each senior student should serve in the wards for at least three months, or, better still, for six months. One point has to be taken into consideration. We have adopted the concentration plan, and the group of clinical clerks in medicine when on duty in my wards have that as their major subject, and are not specially pressed by other work, but I feel it would be very much better to extend the length of service.

I meet my clinical clerks one evening in the week

for an hour and a half or two hours, and discuss in a friendly, social way the events of the week. This, too, gives me an opportunity to talk for a quarter of an hour or twenty minutes upon some subject of general interest relating to the history of medicine, or to some special disease in which they are interested. Once a week, also, Dr. Futcher, my first assistant, has a general meeting of the house-staff, in which matters relating to the teaching and general work come up for discussion.

We lay much stress and emphasis on the character of the work done in the wards. It counts in the final estimate, and the house physicians and my first and second assistants are consulted with reference to its quality.

(b) The General Clinic in the Amphitheater.—At twelve o'clock on Wednesday I hold a clinic at which the general experience of the week is discussed. The clerks are grouped in the arena and the cases of interest are presented. The clinical clerk reads the history and, if it is a fever case puts the chart on the blackboard. Fig. 6 gives a view of the clinic, with the professor and student discussing the problems of a case. I like the clinical clerk and the patient to do the teaching, adding comments here and there, or asking the former questions; sometimes giving ten or fifteen minutes talk on some special feature or on a group of cases. The fatalities of the week are discussed, and the specimens shown, in which way the clinical pathology of the diseases is considered. the mistakes in diagnosis acknowledged and corrected and many valuable lessons learned. Cases are reported which may not have been before the clinic, though many of the third and fourth year classes may have seen them in the Dispensary or in the wards.

As I mentioned, junior and senior students attend this class, and as far as possible we try in it to discuss the great diseases as they come with the seasons. During the first term we discuss malaria and typhoid fever, and at every clinic cases are shown and the features of the diseases discussed. From November 1 to April 1 there is one monotonous bill-of-fare, pneumonia; while in the spring the clinical diet is more diversified. I often tell the members of the observation class that they need to know but one disease well—syphilis—as in mastering it they will grasp a greater range in general and special pathology than in any other affection. In the Wednesday clinic I try to present during the session all the clinical phases, complications and sequelæ of the two great acute infections, typhoid fever and pneumonia. The entire experience of the hospital is presented to them without, so far as is possible, the omission of a single detail of importance. Early in the session committees are appointed to report on certain diseases, particularly those just mentioned. During the months of October, November and December the first question asked at the clinic is: How are the typhoid fever patients? and so far as possible every case presenting features of interest is, if not shown at the clinic, reported upon on or after the lecture. Dr. Futcher takes a group to the ward to see the patient, should he be too ill to bring down. On a blackboard, as shown in Fig. 6, the Typhoid Committee puts, in order of occurrence, the complications and sequelæ of the disease, so that we can refer to them, and that the students may copy them for reference. As we have between 80 and 90 cases of typhoid fever during the session, a student in the two years gets a very extensive knowledge of the disease at first hand. Even greater emphasis is laid upon the teaching of pneumonia—the great acute disease, the present "captain of the men of death," to use a phrase of John Bunyan. After December 1 the cases begin to come in, and, week by week, until April, or even until the middle of May, there is the recurring question, How are the pneumonia cases? Week by week the record is placed on the blackboard, as shown in Fig. 7, and the clerks report on the new cases, on the progress of the old, and the lesions of the fatal cases are discussed. Questions of diagnosis, prognosis and treatment constantly arise, and by the end of the session a large amount of concrete, first hand information has been laid before the class. Reference is frequently made to valuable papers in the literature, and I am glad again, and before this Society, of which he is the honored Secretary, to bear witness to the great usefulness of the series of exhaustive papers on pneumonia by Dr. Wells. The table gives the main facts of each case; the arrow indicates a death. As the number increases the mortality is given every week. A final report is made by the Committee at the end of the session, and the cases are arranged in five groups.

1. Croupous pneumonia proper.
2. Ether and surgical pneumonia.
3. Terminal pneumonia.

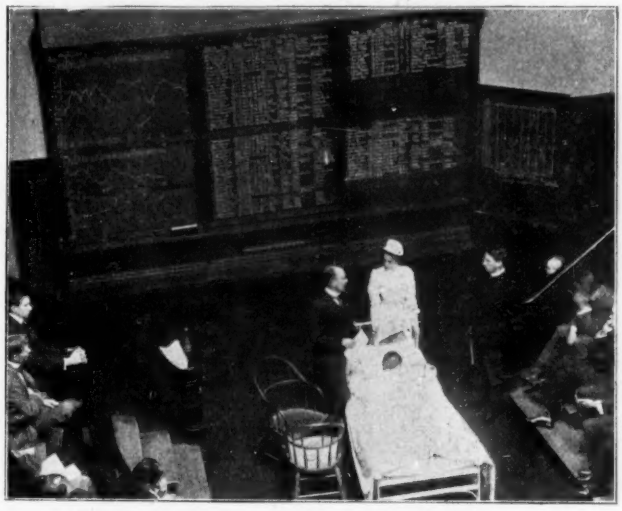

Figure 5.

4. Cases admitted as pneumonia, or diagnosed as such, but which turn out to be something else.
5. Cases admitted with the complications or sequelæ of pneumonia.

As on an average about 60 cases occur during the session, the student during his third and fourth years gets a fairly comprehensive picture of the disease. And here let me make a brief digression. I would rather teach medicine from pneumonia and typhoid fever cases than from all other diseases put together. They remain the two great acute infections, always with us, and of perennial interest. It would do good if every teacher in the country would devote half the time of his clinic for the next few years to them alone. That we have not done our duty in the matter of typhoid fever, the experience of the Spanish-American War plainly showed. The culpable ignorance on the part of practitioners of well recognized facts about the disease is to be laid at our doors. Half a dozen lectures on the subject, and the demonstration of a few cases in the amphitheater will not give men a working knowledge of the disease, which can only be had by personal contact with patients in the wards. Think of the thous-

ands of cases of typhoid fever in the hospitals of our large medical centers—how small a number are watched from beginning to end by our senior medical students; and yet it is in the wards alone that a saving knowledge of the disease can be obtained. Of the natural history of no other disease is it so vital for the student to have a clear conception. It is a malady, moreover, of such surpassing interest and of such infinite variety; one, too, for which we can do so much, that the better it is known the more successful will the practitioner be in his warfare against it. Of equal importance is it that the student shall know pneumonia thoroughly. I spoke of it a few minutes ago as the captain of the men of death, a term which John Bunyan applied to consumption. In the recent March *Bulletin of the Department of Health,* of Chicago, Dr. Reynolds, the commissioner, shows that here, at least (and I believe the same holds good throughout the country), pneumonia now heads the list as a cause of death. There were more than 25,000 deaths from it during the past decade in this city! Think, too, of the enormous advantages offered by the large hospitals for the study of this

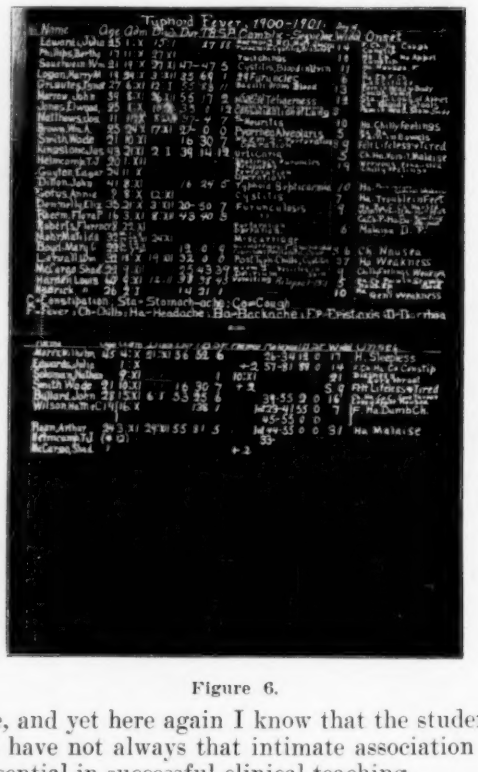

Figure 6.

scourge, and yet here again I know that the student and patient have not always that intimate association which is so essential in successful clinical teaching.

(c) The Recitation Class.—Not all diseases can be studied by students practically. Some, as typhus fever, cholera and yellow fever, are rarely seen now-a-days in this country. Others, common enough, as the eruptive fevers of children, are not easy to teach. In the absence of a proper hospital for infectious diseases, we have to take our chances in Dispensary cases and the few admitted to the Isolation Ward. As a rule, students need a supervision of their reading, and for this purpose a recitation class is held for the fourth year, in which every week a specific subject is considered and the students examined by Dr. McCrae, one of the instructors.

This, in brief, is the story of our work in medicine.[1]

In his advice to students Erasmus urges them to read, first, the best books, and I am firmly convinced that the best book in medicine is the book of Nature, as writ large in the bodies of men. You remember the answer of the immortal Hunter, when asked what books the student should read in anatomy—he opened the door of the dissecting-room and pointed to the tables. Erasmus further adds that the important thing is not how much you know, but the quality of what you know, and in the natural method of teaching medicine the quality is certainly of the best, since it is the knowledge grounded in personal experience, and out of which wisdom may arise. That was a keen comment of Tennyson's when he said, "Knowledge comes, but wisdom lingers," indicating the difference between the two, a difference never better expressed than in the well-known lines of Cowper:

> "Knowledge and wisdom, far from being one,
> Have ofttimes no connection. Knowledge dwells
> In heads replete with thoughts of other men;
> Wisdom in minds attentive to their own.
> Knowledge is proud that he has learned so much;
> Wisdom is humble that he knows no more."

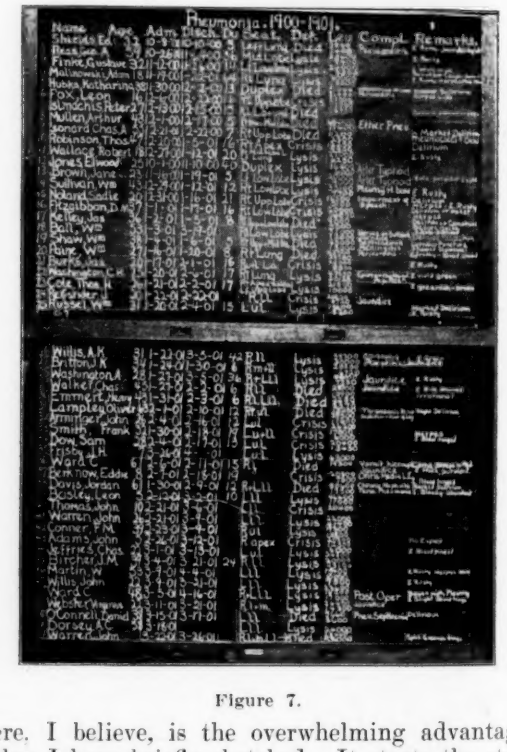

Figure 7.

Here, I believe, is the overwhelming advantage of the plan I have briefly sketched. It starts the student with the avowed object of getting wisdom—the principal thing—the wisdom gained from experience, not simply knowledge gained from books, and a clinical sagacity which may make him a helpful, sensible Doctor. Of this I am assured, that he will be the best

1. As I stated, there is nothing new in the method, by which in fact rational medicine was introduced by the Greeks. In a remarkable chapter in his work on "Greek Thinkers," Vol. I (Scribners, 1901), Professor Gomperz pays a splendid tribute to the influence of Hippocrates and his colleagues in fostering the growth of positive or rational science. He writes: "It is the undying glory of the medical school of Cos that it introduced this innovation (the habit of careful observation) in the domain of its art, and thus exercised the most beneficial influence on the whole intellectual life of mankind. 'Fiction to the right! Reality to the left' was the battle-cry of this school in the war they were first to wage against the excesses and defects of the nature-philosophy. Nor could it have found any more suitable champions, for the serious and noble calling of the physician, which brings him every day and every hour in close communion with nature, in the exercise of which mistakes in theory engender the most fatal practical consequences, has served in all ages as a nursery of the most genuine and incorruptible sense of truth. The best physicians must be the best observers, but the man who sees keenly, who hears clearly, and whose senses, powerful at the start, are sharpened and refined by constant exercise, will only in exceptional instances be a visionary or a dreamer."

practitioner who begins his life work as a student among patients, learning for himself under guidance how to observe, how to think, learning what disease is and how it is to be treated. Years ago, my preceptor, Dr. Bovell, placed in my hands Latham's "Clinical Medicine," and he marked a passage which contains the alpha and omega of clinical teaching, and with it I will conclude: "In entering this place," speaking of the wards of St. Bartholomew's Hospital, "even this vast hospital, where there is many a significant and many a wonderful thing, you shall take me along with you, and I will be your guide. But it is by your own eyes, and your ears and your own minds and (I may add) your own hearts that you must observe and learn and profit. I can only point to the objects and say little else than 'see here and see there.'"

RELATION OF THE MEDICAL PROFESSION IN THE TWENTIETH CENTURY TO THE TUBERCULOSIS PROBLEM.*

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NEW YORK CITY.

At no epoch in medical history has the tuberculosis problem been treated by the medical profession with more energy, more enthusiasm, and more success than at the present time. This awakening to the danger of tuberculosis, particularly in its pulmonary form, consumption, is primarily the result of the labors of four great men, Villemin[1], Koch,[2] Cornet,[3] and Fränkel.[4] It was Villemin who first showed beyond a shadow of doubt the transmissibility of tuberculosis and its infectious character. To Koch we are indebted for the proof of the microbic origin of tuberculosis; to Cornet and his pupils for the demonstration of the infectiousness of tuberculous dust, and to B. Fränkel for the very interesting experiments in drop infection.

From the works of the men whose names we have just mentioned we learned not only the true etiologic character of tuberculosis, but also how to prevent infection. The prophylaxis of tuberculosis has become an exact science and is now practiced in all civilized countries with more or less rigor. Wherever it is practiced with the greatest rigor the mortality from consumption has correspondingly decreased.[5] Thus we have in Paris 4.9 deaths from phthisis pulmonalis for every 1000 inhabitants, in Vienna 3.81, in New York 2.26, in Berlin 2.19, and in London only 1.87 deaths from consumption in every 1000 inhabitants.

The curability of tuberculosis was pathologically demonstrated as early as 1838, when Carswell[6] wrote "pathological anatomy has, perhaps, never given more decisive proofs of the curability of a disease than it has given for pulmonary consumption." Clinical evidence goes as far back as to the Arabian school. Avicenna,[7] who lived from 980 to 1037, and his pupils recorded the first authentic cures of the disease. It seems, however, in spite of the teachings of the masters of old, that up to the middle of last century the medical men as well as the laity gradually came to consider consumption a divine visitation, in the face of which all they could do was to fold their hands and await the fatal termination.

Through the genius of Hermann Brehmer this nightmare of the incurability of consumption was at last dispelled. His thesis for the final degree of Doctor of Medicine, "Tuberculosis primis in stadiis semper curabilis," is characteristic of the man's life work.[8] He not only cured himself of consumption, but during the thirty years of his directorship of the Goerbersdorf sanatorium he cured thousands of patients suffering from pulmonary tuberculosis, and made happy men and women of them and useful members of society. The service which his most celebrated pupil, Dr. Dettweiler, rendered to modern phthisiotherapy by inaugurating the rest-cure in the open air, is certainly equally great.[9] The Brehmer-Dettweiler method, which represents the open air and hygienic and dietetic treatment of consumptives under constant medical supervision, must really be considered up to this date the only rational treatment, the one which has given thus far the best and most satisfactory results.

To our own country belongs the honor of first having given the benefit of this most rational treatment of consumption, not only to the well-to-do but also to the unfortunate sufferers of limited or no means. We may well be proud that we can say, the first people's sanatorium for consumptives was begun, seventeen years ago, in the Adirondack Mountains, under the directorship of Dr. E. L. Trudeau,[10] the American pioneer in modern phthisiotherapy. Of the great and good work this man has done we all know. His example has been the incentive to many similar noble enterprises.

The tuberculosis problem in our own country is nevertheless far from being solved. Tuberculosis is and must always be considered not only in a purely medical but also in a social aspect. Without statesmen, without the municipality, without philanthropy, this great tuberculosis problem will never even approach its solution. The bulk of the work, however, must be done by the medical profession, and I may perhaps say right here, not by the specialist, nor the sanitarian or health officer, but by the general practitioner. It is the family physician who sees the early cases of pulmonary tuberculosis, which are the most hopeful ones. By his periodic examinations of all the members of the family he will not only often discover the very earliest signs and symptoms of the disease and institute immediate treatment, but by his familiarity with the constitutions of every one of the family he will inaugurate such preventive measures and treatment as will build up and fortify the only as yet predisposed individual to such a degree that it will make the invasion of the bacilli practically impossible.

It seems as if the tuberculosis problem, viewed in its modern aspect, will help to hasten the time when the physician's calling shall have attained its highest ideal —namely, the prevention of disease. The physician must not only be a healer but also a doctor, that is to say, a teacher. Let us, however, not forget that physicians are men, husbands and fathers, and they want to live and support their families. The true family physician should be paid and well paid for preventing disease. The family who engages him should realize that the timely word of advice concerning the proper mode of living, hygiene and care, is worth a good consultation fee.

I go still further in my views on this subject by saying that even the poorest family should have a family physician whose duty it would be to care for them in case of sickness, but who should also pay them regular visits at any other time as an advisor and teacher of home-hygiene and the proper mode of living. Since the poor family will not be able to pay the doctor for his services, he should be remunerated decently from the public funds.

* Address delivered, by invitation, before the Buffalo Academy of Medicine, Buffalo, N. Y., May 14, 1901.

I know I will be told that this would be Utopian and altogether too expensive to the community. I will refute this statement and prove by figures that it would be cheaper for the community to engage well-trained physicians for families that are not able to pay their own doctor than to wait until they get sick and have to be nursed and cared for at public expense. Since we are speaking of the tuberculosis problem only we will confine ourselves to this one disease. Supposing a large community is obliged to take care of a thousand consumptive poor who come to its institutions in the incurable state of the disease to be nursed and taken care of until they die. The average daily cost of a patient in the hospitals of our American cities is not less than one dollar and a half. The average stay of a poor consumptive when he seeks the public hospital is, as a rule, nine months. From the day of his entrance to his demise he costs the community at the very least $400. For a thousand patients this would make $400,000. It is well known that 75 per cent. of early cases can be cured under proper hygienic and dietetic care in about six to eight months, at a cost of from $1 to $1.25 a day as inmates in a properly conducted sanatorium.

Statistics show that the death-rate from consumption is highest between the ages of 17 and 35, that is to say, at a time when the individual should be a most useful member of the community, self-supporting if not supporting a family. Those familiar with the life of the average American workman will know how he and his family often shrink from the thought of entering a hospital. These men will make all possible sacrifices in order to keep the sick member of the family at home, and provide such medical attendance for him as they are able to procure. But timely and regular medical attendance is rather the exception than the rule among poor families where there is a consumptive invalid. They will first try all kinds of quack remedies, ask their druggist for advice, or, attracted by some glaring advertisement of a sure cure of consumption, fall into the hands of some unscrupulous charlatan.

It is evident that there would not only be a direct benefit to the families of the laboring classes from timely and judicious treatment of any of their consumptive members, either at home or in a sanatorium, but the community at large would be a direct and indirect gainer. By providing medical attendance to families unable to pay a regular physician, or by placing the consumptive patient in time in a sanatorium, the pulmonary invalid has 75 per cent. of chances of cure and is prevented from infecting his own kin and neighbors. Seventy-five out of one hundred consumptive patients will be prevented from becoming burdens to the community. All this would be direct gain to the respective municipality; but the indirect gain to the commonwealth by curing and making strong and useful citizens of seventy-five out of every hundred tuberculous persons who were otherwise doomed to death in the prime of life is well nigh beyond calculation.

There is no doubt in my mind that tuberculosis as a disease of the masses can and should disappear in civilized countries, and it devolves upon us as medical men of the twentieth century to devise means and propose measures to our municipal authorities, state legislatures and philanthropists that will best accomplish this much-desired end. The old Scotch proverb, "an ounce of prevention is worth a pound of cure," is perhaps not more applicable to any disease than to tuberculosis, and particularly to phthisis pulmonalis. We all acknowledge Koch's bacillus as the true etiologic factor in tuberculosis, but we also know that in health the accidental inhalation of a few bacilli, the swallowing of some tuberculous milk, or even a scratch infected with tuberculous matter, are rarely of any consequence. The healthy nasal secretion is bactericidal; the ciliated epithelium of the upper respiratory tract is a physical hindrance to the bacilli. The gastric secretions, too, are, in a large measure, bactericidal, and the phagocytic power of the white blood-corpuscles is, in the healthy individual, the best safeguard against the invasion of the bacilli.

It is the badly-housed, underfed, overworked people, weakened by disease, intemperance and excesses, who soonest fall a prey to the tuberculosis bacillus. We as physicians must insist that the dark, dreary, badly-ventilated tenement home and lodging house should disappear. By giving to the laboring classes better tenements, where sunshine, light and air are plentiful, with at least 600 cubic feet of space allotted to every individual, we will save many a one from becoming tuberculous.

The underfeeding of the poor is perhaps more often caused by ignorance than want. It may be a surprise to some if I say that because of ignorance there is more waste in the families of the poor in cooking and housekeeping than in the families of the well-to-do. To combat this evil it will be necessary to introduce lessons in proper cooking and economic housekeeping into the curriculum of our girls' schools. What is saddest of all is that the underfeeding of the poorer classes extends to the children, especially during their school age, when the organism is growing rapidly and the desire for good and abundant food is most pronounced. The child of poor parents gets up in the morning, takes a hasty breakfast of mush and milk, and then runs off to school with a few crackers in his pocket or a penny or two with which to buy a roll. It is evident that such a child can not resist the invasion of any serious disease, and certainly not that of tuberculosis. The need of giving to children of the poor, while attending school, a substantial meal at lunch time has been realized in some German cities, and in our country in the city of Boston. In the latter city, with the sagacity characteristic of Boston people when dealing with philanthropic problems, these lunches are, however, not entirely free. They feared, and justly so, that to give these lunches away might have a tendency to pauperize. In German cities they give meat sandwiches and a glass of milk; in Boston the lunches furnished to children are mainly nutritious soups, milk or cocoa and crackers, or plain buttered sandwiches. The prices for school lunches, furnished by the New England Kitchen, of Boston, vary from 5 to 10 cents. In German cities where this experiment has been tried, careful statistics have been kept which showed that nearly every one of the children increased in weight from one to two pounds within a very few weeks, and their capacity for intellectual work had increased correspondingly. I have said before that the cause of the malnutrition of the poor is often to be found in ignorance. In a wealthy family, if a child or grown person grows thin in spite of plenty of food, the family physician would be consulted, and not infrequently would discover the cause of malnutrition to be the fact that the food given to the patient was not the proper kind, and with a change in the right direction the patient improves. The poor alone have no one to turn to for advice; they only go to the dispensary when they are really sick; they have neither time nor are they

observant enough to discover slight ailments such as an impaired digestion or lack of assimilation, conditions which are the true forerunners of consumption. I say again, give to every family, too poor to pay for a family physician, the right to select such a one and have the municipality pay for his services, and the commonwealth will be the gainer at the end financially as well as in the saving of life.

Whatever has been accomplished in some of our states in the direction of prohibiting child labor and in the regulation of working hours for adults has been accomplished through sanitary authorities, that is to say, physicians. They solicited the aid of wise statesmen, and thus we enjoy, at least in some communities, humane laws in this respect. We all know, however, how much more is to be done in this direction by taking children under 14 years and child-bearing women from the mines and factories.

Phthisiogenetic diseases, such as smallpox, scarletina, measles, la grippe, are all diseases which the earlier they are discovered the more chance there is of their taking a favorable course. The one who discovers them first among the well-to-do is the family physician. He may discover the early symptoms of these diseases on his regular visit before the sufferer himself has an idea of being a patient. In the family of the poor the disease must be far enough advanced for a layman to discover it before medical aid can be expected. Let me here show the great good which is accomplished by school physicians in communities which are wise enough to inaugurate such truly efficacious methods of preventing disease. I can not plead strongly enough for the employment in every community of a sufficient number of skillful and competent practitioners as school physicians and a reasonable remuneration for their services. The school physician, during his daily inspection of the children, will not only detect acute contagious disease, such as variola, diphtheria, scarlatina, measles, etc., but he will also detect chronic diseases, such, for example, as tuberculosis, and through its early recognition and timely and judicious treatment save the life of many a child. Of course, a regular periodic examination of the chest of all the children would have to be a part of the work of the school physician.

Venereal diseases, excesses and intemperance may be classed under one heading, and may be called a trinity of evils resulting from ignorance. While the social reformer and clergyman may do their grand work in helping to combat them, I claim that here again the family physician has to do the bulk of the work. The latter, who should be, and I am glad to say often is, the confidential friend of every one of the family, old and young, will, more than anybody else, be able to warn the young man of the danger which besets him when starting out in life. If a member of the family has been unfortunate enough to contract a venereal disease, the family physician will see that proper treatment is instituted and all precautions taken to prevent further infection. Again it is the family physician, friend and advisor, who may exert the most beneficent influence on old and young by pointing out to them the danger of excesses of any kind, and particularly intemperance, for let us not forget that alcoholism is one of the most important phthisiogenetic diseases. In European sanatoria for tuberculous and scrofulous children statistics show that more than 25 per cent. of the little inmates are of alcoholic parentage.

The physician acquainted with the tendencies of the individuals entrusted to his care will know when to sound the note of warning. He will be able to combat the idea which, alas! is still very prevalent among the laity, namely, that alcohol is a good remedy for consumption. He will exert all his influence to show that alcohol is not a food, but, when taken in excess, a dangerous, powerful poison, destroying body and soul, undermining the strongest constitution, causing untold misery and want in many once happy and prosperous families. With such a medical advisor given to him by a wise and beneficent government, the honest but poor laborer will be protected from tuberculosis and other diseases, and the moral influence which a true physician can exert in these environments must be of incalculable value to any community.

Now, however, comes the question, what are we to do with the countless individuals with whom prevention is no longer possible because they are already tuberculous? First, we must decide whether or not it is wise to favor compulsory notification or registration of tuberculous cases. If compulsory registration of a tuberculous patient who comes under the observation of a physician should mean additional hardship to the sufferer or his family, I would certainly protest against such procedure. If through such a notification the health officers would have a right to interfere with the hygienic and therapeutic management inaugurated by the attending physician, I would also consider compulsory registration ill advised. On the other hand, I think it most advisable that every physician should be requested, in the interest of statistical as well as demographic science, to report to the respective health authorities the age, profession and residence of every tuberculous individual under his observation. Many of the underlying and not yet quite comprehended causes of some of the predisposing agencies to consumption may thus be discovered and the remedies found. But as I have said, no hardship to the tuberculous patient or his family should arise from this procedure. As long as the patient and his friends obey the instructions given by the physician, so long should they remain unmolested. I think the custom of the New York City Health Board, which furnishes physicians with postal cards for reporting cases, is a most admirable one. These cards read as follows:

REPORT OF CASE OF TUBERCULOSIS.

New York, ...190..

Name of Patient ..... Age.....

Sex ..... Occupation .....

Residence .....

Previous cases in family, and relation to patient .....

.....

Do you wish an inspector to visit the premises and instruct the family regarding prophylaxis? Answer yes or no.....

.....M.D.

Residence.....

NOTE.—Cases of tuberculosis will NOT be visited by an inspector from the Department of Health except upon the request of the attending physician.

No reasonable objection can be made to such a procedure. Every conscientious physician will see that his directions are carefully carried out. The Board of Health might, however, aid him if it chose, by sending to the physician reporting cases of tuberculosis leaflets giving needed information to consumptives and those living with them; additional verbal explanation on the part of the attending physician will enhance the value of such instruction leaflets. In case of demise or removal a disinfection of the consumptive's apartments should become obligatory. It may also be necessary, if

the patient or his family wantonly disregards the hygienic precautions necessary to prevent communicating the disease to others, that the attending physician seek the aid of the health officer to enforce a proper hygiene. However, I repeat, let us not exaggerate the contagious nature of tuberculosis by adding unnecessary hardships to the sufferings of the consumptive, his relatives or friends, for pulmonary consumption is, after all, not a contagious but only a highly communicable disease. The contact *per se* of a clean consumptive is not dangerous, nor is there any danger for those who live with such a one. Treat the consumptive who is conscientious and does his very best to protect his fellowmen from infection with the utmost kindness, and do not let him feel as if he was an outcast from society. Let us, as physicians of this enlightened age, be intelligent workers in the antituberculosis crusade, but, I pray, let us not become phthisiophobic, nor encourage phthisiophobia.

Let us educate the whole community to the true nature of consumption. There should not be a city of any size in the Union without a society for the prevention of tuberculosis, and these societies should be in contact with a great national society. It is a sad fact that our great country is still without a national antituberculosis organization. England has its "National Association for the Prevention of Tuberculosis"; France has its "Oeuvre anti-tuberculeuse"; Germany has its "Central Committee for Antituberculosis Work," and even Russia has a "Pirogoff Society for the Study of Tuberculosis." Within your immediate neighborhood, across your beautiful Niagara Falls, you will find an excellent organization under the name of "The Canadian Organization for the Prevention of Tuberculosis," with His Excellency the Earl of Minto, the governor-general, as honorary president, and as president, Sir James A. Grant, M.D., K.C.M.G.

I am delighted to learn that you have such an association in your midst under the name of "The Erie County Anti-Tuberculosis Society," and it seems to me that the Pan-American Exposition would offer a good opportunity to appeal to all existing anti-tuberculosis societies of this continent, or at least of the United States, to combine into the formation of a great American association for the prevention of tuberculosis. It is evident that a great power for good would be exerted through such a national association. The excellent results accomplished by similar societies in other countries should be a great incentive to us for emulation. I trust that from the distinguished president of the Erie County Antituberculosis Society such an appeal for a union will go out, and I am sure it will meet with universal success and appreciation.

You know the aims of these societies are to educate the general public in the prevention of tuberculosis by lectures and the distribution of suitable literature, and to encourage the erection of sanatoria available to all affected. Our Canadian brothers have, however, added to the scope of their work by seeking the coöperation of life insurance companies, benefit societies, railroad companies, factory owners, and other organizations whose material interests would be benefited directly by the work of the association.

Largely through the efforts of one of your own townsmen, my distinguished friend, Dr. John F. Prior, we will soon have in the State of New York, in the Adirondack Mountains, a sanatorium for the consumptive poor. This will, I believe, offer accommodations for from 200 to 300 patients. Buffalo, as the second largest city of the state, will be entitled to the proportional number of fifteen to twenty beds. To use the pictorial language of that great physician, the late Professor Dacosta, of Philadelphia, this must seem like "a drop of relief in an ocean of woe." You should have your own sanatorium, created by your city government and with the help of the philanthropists of your own city. This sanatorium, belonging to Buffalo, should be situated at not too great a distance from the city, but preferably in a well-drained locality where the air is pure and good water abundant. Furthermore, you should have a city hospital for consumptives situated in or near the city, in a healthy spot where there is as little traffic as possible. This institution should serve as a reception hospital for all cases of tuberculosis; the more advanced should be retained here, and those having a fairly certain chance of cure or marked improvement should be sent to the sanatorium. A special city dispensary should be established for the treatment of ambulant tuberculous patients or for the control of such as have left the sanatorium cured or improved. To guard the improved consumptive against relapse, to guide him even after having left the institution, is a very important portion of the solution of the tuberculosis problem.

Besides this there should be a special institution, in a particularly healthy spot, for the treatment of tuberculous and scrofulous children. Let us bear in mind that the cure of a scrofulous or tuberculous child may mean saving the life of a man or woman, for had they not been treated during childhood they might have succumbed to tuberculosis at maturity, or a few years later.

As to the need of such institutions in your city, it would hardly seem necessary to say anything. Every one is acquainted with the situation. You have any number of tuberculous poor in your midst, for whom there is neither hospital nor sanatorium. Many of them live in badly constructed buildings, and being without medical supervision infect their own kin and neighbors besides reinfecting themselves. If they move they leave infected rooms behind them. Dr. Delancy Rochester, Dr. John F. Prior, and a number of others, more familiar with your local situation than I am, have repeatedly urged the establishment of such institutions, and I can only repeat here the forcible words of Dr. Prior, as correctly as I can remember them, when he said: "Let us treat the tuberculous patient at the right place and at the right time when there is still hope for their recovery, and not at the wrong place and the wrong time until they die."

That there is no danger to either nurses or help or to the neighborhood from a well conducted sanatorium or special hospital for consumptives, all those familiar with the institution work know very well. Those who doubt these statements I must refer to the reports of the Adirondack Cottage Sanatorium, where not one case of contagion among the nurses has taken place in the seventeen years of its existence. In localities where German institutions are situated, statistics show that the mortality from tuberculosis has actually decreased in the surrounding villages since the establishment of the sanatoria.[11] The clean habits of the inmates of the institutions, which the villagers imitated, have doubtless been the cause of the improved sanitary condition of the respective villages.

Supposing, then, you would have in your city the institutions enumerated above; if every family, poor or rich, would have its physician, the selection of the

proper cases for the respective institutions would not be difficult. The family physician could coöperate with the institution physician, and the most harmonious work could be accomplished. I have pleaded in the first portion of my paper for the just remuneration of the family physician of the poor by municipal funds, and have shown by figures that the commonwealth would be the gainer by employing and paying competent physicians for this work. It would be unjust should we expect the physicians of tuberculosis sanatoria, hospitals or dispensaries, who labor for the same noble work and also indirectly save thousands of dollars to the public treasury, to do this work for nothing. The Massachusetts State Sanatorium for Consumptives, the only institution of that kind now in operation, pays its visiting and house staff well for their services. This progressive state has learned that it is wise, best and just to do so. Let other states follow this example.

In assuming the state or municipal care of consumptives we must prevent pauperizing. There should be in every community a tuberculosis commission, composed of people skilled in dealing with charity problems. The duty of this commission, which should be in the employ of the city or state, must be to investigate every case applying for free treatment in an institution. It is my belief that if a patient is able to pay the entire or a portion of the expense of his maintenance in a sanatorium, he should be made to do so, providing that the other members of the family remaining at home are thereby not exposed to privation or want.

The scheme whereby the Germans are gradually coming nearer and nearer to the solution of the tuberculosis problem is, I fear, not practicable in this country. There the state invalidity insurance companies, which are under government control, have been the means of reducing the mortality from, and morbidity of, tuberculosis in a most remarkable degree. In Germany, the moment an individual enters upon the career of an ordinary laborer or servant he is obliged to be insured against sickness, accidents and old age. If he develops tuberculosis he is immediately sent to one of the many sanatoria of that country.[12] The government authorities, who are at the head of these state insurance companies, have long since learned that through a timely treatment in a sanatorium the tuberculous individual is most speedily and lastingly cured, and consequently with the least expense.

The insurance companies have erected several sanatoria, but they are not sufficient to accommodate the large number of individuals who avail themselves of the privilege to enter these institutions for treatment. Therefore the insurance companies have made arrangements with no less than seventy-eight German people's and private sanatoria and now have 5000 beds in all at their disposal to which to send their tuberculous invalids.[13] In the United States not even our rich and powerful private insurance companies will insure a member of a tuberculous family, much less a person suffering from incipient phthisis.

In my humble opinion the tuberculosis problem can not be solved in any other way in this country at the present time than by methods I have endeavored to outline. We must consider our social conditions and customs and treat the cause and the effect at the same time. The American general practitioner of the twentieth century must be a physician, sanitarian and teacher of hygiene. His services in preventing disease should be considered as valuable, and more so, than his services in curing disease. The state must compensate him for whatever he does in the promotion of the health and wealth of the community. To the American physician of the twentieth century will then belong the honor of having solved one of the most difficult medical and social problems of our time. High as the ideal of the physician has always been, from the time of Æsculapius to the present, an intelligent American public will, through just and wise legislation, enable the physician of the twentieth century to rise still higher. To be a true doctor, to attain the highest ideal of all, he must not only be a healer but a teacher as well.

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Original Articles.

GUMMA OF THE SPERMATIC CORD, WITH REPORT OF A CASE.

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My reason for presenting this short paper is twofold: 1, on account of the interest involved in the study of syphilis *per se*, and 2, on account of the rarity of its manifestations in this particular location, namely, the spermatic cord. Cases have, however, been observed in which a syphilitic enlargement of the cord has been diagnosed. Thus Verneuil[1] has recorded a case of gummatous swelling of the cord in a patient who had also a gumma in the heart. The specimen in this case was presented to the Society of Anatomy of Paris, in 1856. The morbid growth was found, after death, to be the size of two fists; it occupied the scrotum and ascended along the cord as far as the iliac fossa. The growth had been mistaken for a carcinoma during life.

Lancereaux[2] gives details of a case in which, in connection with syphilitic disease of the testis and epididymis, the cord was enlarged and swollen in several places, one of the swellings being as large as a chestnut. Recovery took place under iodid of potassium. Fournier[3] again mentions a case of syphilitic testes where the cord was involved. In inherited syphilis also the cord may be affected. A child under the care of Obedenare,[4] with enlargement of the testis, had also enlargement of the spermatic cord. However, late syphilis seems very rarely to attack the cord independently of the neighboring or connecting structures.

Morrow[5] says, that on one occasion, in the case of a gentleman who had contracted syphilis some years previously, he observed the appearance of a painless, quite

firm tumor which attained the size of an almond, in connection with the cord of the left side, just outside of the external ring. Under mixed treatment this soon disappeared.

Bert[6] reports a case in which both spermatic cords were affected. On one side absorption of the nodules took place under specific treatment, while the nodules on the other side broke down and discharged a gummatous material, the remaining scrotal structures being apparently free from disease.

Heliot[7] reports two cases, the correct diagnosis of which is open to question.

Kocher[8] observed two gummata in the spermatic cord of a patient, one of which was as large as a goose egg.

M. Von Zeissl[9] observed a suppurating tumor of the right side of the scrotum involving the vas deferens. The tumor was irregular, elastic, and of the size of a pigeon egg. The patient presented a relapsing syphilide.

Mauriac[10] describes a case of a solid tumor of the right spermatic cord appearing ten years after the first manifestations of syphilis, and draws attention to the extreme rarity of specific affections of the cord alone.

Reclus[11] reports two cases of syphilitic inflammation of the spermatic cord, with stiffening and rigidity of the vas deferens.

Goldenberg[12] reports an interesting case with microscopic findings of a round, sharply circumscribed, hard mass, apparently cystic to the touch, about 2 cm. in diameter, situated on the left posterior surface of the scrotum, about one-quarter of an inch from the raphé. The testicle and epididymis were perfectly normal.

Brossard[13] says syphilitic gummata are present in the form of small nodules, which are painless, intimately connected with the spermatic cord, surrounded by its tissues, and entirely distinct from the testes. They seem to be smooth and elastic to the touch. In the two cases which came under his observation, they did not show any tendency to soften or to ulcerate; nevertheless, we should not from this conclude that such a course or termination is impossible, or even improbable. His first case died from an intercurrent affection, and in the second case the gumma had been removed by a surgeon a short time after its development.

I report the following case: C. S. presented himself for treatment in 1897, with a history as follows: In the fall of 1890 a sore appeared on the right side and about the middle of the shaft of the penis four weeks after intercourse, followed by enlarged glands, chain-like in character, affecting only the right inguinal region. There was no pain nor tenderness on pressure, and this was followed by a roseola eruption. Early in 1891 mucous patches appeared in the mouth and on the fauces. In 1897, when the patient came under my care, he complained of pain and tenderness along the left tibia from the knee down to the ankle, the pain becoming intensified at night. On the right foreleg five ulcerating gummata presented, kidney-shaped, with undermined edges, and emitting considerable serous discharge. The ulcers had existed for about nine months, and promptly healed under the potassium iodid treatment, but as is usual in these cases the patient then disappeared. In August, 1899, he again presented himself with a firm, painless tumor, about the size of an almond, presenting just outside the external ring, in connection with the cord of the right side. This promptly disappeared under the iodid treatment and inunctions of vasogen mercury, 33 per cent., since which time no further syphilitic manifestations have been noted.

It has already been stated that the spermatic cord in syphilitic affections of the testes and epididymis is very seldom involved. It occurs less frequently as an independent manifestation.

Neumann[14] says: "Usually one finds on palpation that the cord inside the scrotum is decidedly thickened, so that the individual parts can not be differentiated, the consistency is decidedly increased, at times it is even of cartilaginous hardness. In most cases this thickening extends from the epididymis to the cord; occasionally, however, there is an intervening normal portion between the epididymis and cord. The surface is sometimes smooth, sometimes uneven or tumor-like. The tumor, as a rule, is sharply defined, solitary and unilateral; at times there are two, separated one from the other, sometimes touching each other. They are generally round or oval, varying in size from that of a cherry to that of a goose egg. With the large gummata, they extend into the inguinal region, or may involve the inguinal canal. A certain amount of pain, either spontaneous or due to pressure, may be present. When the tumors attain the size of the testicle the skin will be stretched, the folds of the scrotal skin will be more or less obliterated, slightly reddened, without any marked symptoms of inflammation. At the external ring can be felt a constriction, sometimes superficial, sometimes deep. In large gummata which extend into the inguinal tract the coverings of the cord are changed, just as they are in gummatous orchitis.

"The diseases of the testicle and epididymis come chiefly into consideration in the differential diagnosis. In those extremely rare cases of independent syphilitic diseases of the cord the presence of other symptoms of syphilis and evidence of previous syphilitic diseases are to be considered. In some cases the diagnosis can only be made by the result attained by antisyphilitic treatment."

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SURGICAL SHOCK.*

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Shock is a condition of sudden depression of the whole of the functions of the body, due to powerful impressions upon the system by physical injury or mental emotion. Its more obvious manifestations are lowered activity of the cardiac, respiratory and sensory functions. The symptoms of shock may present all degrees of gravity, from profound collapse quickly succeeded by death to a mere temporary impairment of mental vigor, with transient diminution of muscular energy and a

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slight irregularity of the heart's action, signs which it is very hard to distinguish from syncope, if, indeed, it is possible.

As shock is a disordered function and due to no structural change, its pathology is obscure and difficult to determine. The term "shock" has been employed indiscriminately to describe all cases of sudden death following injury without hemorrhage, and in which post-mortem examination failed to reveal any visible or adequate cause. As accuracy of diagnosis has increased, many cases formerly classed as shock have been eliminated, and opinions as to the pathology of true shock have crystallized into two leading theories, based on certain functional disturbances in the vascular and nervous systems, respectively. One of these theories is that the phenomena of shock are produced by the suspension of the nervous power, manifesting itself through the circulation, resulting in paralysis of the heart and abdominal vessels, and of the whole vasomotor system. The great mass of blood stagnates in the abdominal arteries and veins and the heart muscles are insufficiently supplied with oxygen and are unable to force the small amount of blood through the empty vessels.

The other and better theory, which seems more fully to account for all the phenomena of shock, is that it is due to irritation of the peripheral ends of the sensory and sympathetic nerves and a general functional paralysis of the nerve centers, both spinal and cerebral, which causes arrest or enfeeblement of the cardiac action and disturbed respiratory action. Death from shock may be immediate and result from cardiac arrest. Post-mortem examination of these cases usually shows the right cavities of the heart and great venous trunks distended with blood.

The symptoms of shock are of two general kinds, those due to a stunning or blunting of the vital powers, and called torpid shock, and those attributable to mental terror or agitation, and called erethistic shock, or prostration with excitement. As types of these two classes I desire to present two cases strikingly similar as to character and extent of injury, and yet showing the most marked contrast in symptoms.

The first of these was a woman, 19 years old, injured in a gasoline explosion. The patient lay conscious, yet dazed, seeing with the eye, but apparently failing to perceive with the brain; hearing, but not heeding, or replying only to loud and persistent questions; the eyes dull, vacant, motionless; the face animated by no expression, but pale and bathed in cold, clammy sweat; the features contracted, the finger-nails blue, the body and limbs occasionally convulsed by a shiver, the pulse irregular and very rapid, the respiration slow and irregular, deep sighing inspirations, alternating with shallow and scarcely audible ones. Her temperature was 2 degrees below normal. Reaction could not be induced, and death occurred in five hours, the patient having merely "paused in the act of death."

The second case was a man, 21 years of age, scalded by steam from a locomotive in a railroad wreck. There were the same physical signs of shock as in the torpid case, so far as pulse, respiration, pallor and coldness of the surface were concerned. In addition there was the most extreme and unceasing restlessness and excitability. The patient tossed wildly from side to side, complaining of a fearful oppression and want of breath, shouting in the most piercing tones, and using the most profane and obscene epithets, with a countenance expressive of intense anxiety and the keenest agony. Consciousness seemed unclouded, but preoccupied by the mental and physical anguish, questions being answered, if at all, in a loud and angry tone, the intervals occupied with moaning exclamations. There was burning thirst and fluids were swallowed eagerly. In short, this case well illustrated the comprehensive description of Gross, who says that in shock "the machinery of life has been rudely unhinged." This condition persisted in slowly lessening intensity for twenty-four hours, when reaction was fully established.

From ordinary uncomplicated shock recovery is usually complete. Occasionally, however, a permanent impairment of health follows, as in a case coming under my care in which a man of 35 years was entangled in a coil of live electric wires. Shock was decided, but not profound, and recovery seemed perfect. The patient, however, soon began to show a change of disposition. Formerly cheerful, amiable and kindly, he became moody, sullen and uncertain of temper, and in an attack of pneumonia some ten months later developed homicidal tendencies, and died in acute mania. In this case, doubtless, organic change of the nerve centers had supervened.

A predisposition to shock may exist in persons of sensitive nervous disposition or in the subjects of organic disease, especially of the heart or kidneys.

In those cases of sudden death, formerly classed as secondary or delayed shock, cases in which an interval of hours or even days has elapsed after an injury or an operation without the appearance of any untoward complications, some other explanation must be sought. No theory of nerve injury remaining latent for days and then suddenly manifesting itself with such violence as to terminate life in a few hours, is sufficient. The explanation may be found in pulmonary edema, or in renal congestion, pre-existent or developed as a result of an anesthetic, in concealed hemorrhage or in septic collapse from the sudden absorption of poisonous matters by a large serous surface, such as the peritoneum. Or it may be found in fatty embolism, that is, embolism of small arteries of the lungs, and very commonly of other organs, due to minute drops of fluid fat, which, having been set free somewhere in the periphery—generally in connection with the medullary cavity of bones—are carried into the circulation and follow its ordinary course. It is not easy in all cases to account for the force which is necessary to cause the oil drops to enter the veins. Sometimes the nature of the accident itself will give a reason for it, in the crushing or laceration which includes bones, muscles, subcutaneous fat and vessels alike. In other cases it has been suggested that the liquid fat from the broken-down cells stagnating in a wound is suddenly caught up when the stage of syncope passes off and the heart recovers; or it may be that from the commencement of inflammation there is a sudden increase of pressure and local tension. In these cases the patient may after the accident experience primary or true shock, or may appear perfectly calm and unaffected, his pulse and respiration may be normal and there may seem to be nothing wrong, but after some hours or days the pulse becomes quicker and softer, the eye bright and restless, the respiration embarrassed, the extremities cold and exhaustion or coma and death may supervene. A brief history of a recent case will illustrate:

The patient was a man, 25 years old, five feet seven inches in height, weighing 180 pounds and presenting an appearance before the accident of perfect health. He fell, unnoticed, from the platform of a passenger train moving at the rate of about fifteen miles an hour; was

found within five minutes after the accident, and at once removed on a stretcher to his home, about one-third of a mile distant. A simple oblique fracture of the left femur, at about the middle of its shaft, was the only injury found. Shock was marked, though not extreme. Some rigors and vomiting occurred and the heart was weak. Heat was applied and a hypodermic of morphia and strychnia and a small amount of whisky were given. Reaction was soon established and the fracture was reduced and dressed. The patient passed a good night and seemed to be doing perfectly well in all respects. About fifteen hours after the injury he began to be drowsy, and a slight but persistent cough developed. Soon the pulse increased in frequency and the respiration showed slight embarrassment. These symptoms, except the cough, grew steadily worse. He roused with more and more difficulty, and less perfectly, until in four hours coma was complete. The pulse became very rapid and irregular, the respiration became stertorous and finally assumed a Cheyne-Stokes character; the surface of the body became cold and cyanotic and, twenty-three hours after the accident, the patient died.

At the autopsy fat was found in the heart, lungs, liver and kidneys. The lower lobe of the right lung was hepatized and the blood-vessels of the brain were filled with dark fluid.

As to treatment in this class of cases, the measures suitable to true shock are of most value, as heat, opium, strychnia, digitalis, alcoholic stimulants and intravenous infusion or hypodermoclysis of normal saline solution.

When fracture or crushing injury of large bones has occurred it is very important that the limb be immobilized as soon as possible, so that the freeing and absorption of fat cells may be prevented.

NON-CONSTRICTIVE DRESSINGS FOR FRACTURES.*

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It should be our aim and object in the treatment of diseases and injuries to under no circumstances interfere with the beneficent effort of Nature. In the treatment of fractures with our cumbersome splints and dressings, with many and constrictive forms of bandages of myriad name and nature, with material in some cases so heavy as to make the patient weary with its ponderosity, is it not time to stop and review the whole subject of this form of treatment and study it in its simplicity, aiming to aid and not retard Nature in her effort at repair. We should remember that all indications are fulfilled if the broken fragments of bone are in apposition and at rest. This idea of rest applies to all injuries, but at this time I wish to limit the question to the treatment of fracture, although the principle is the same, in a large measure, to all.

We all know that an unimpeded circulation will give a more rapid healing process than if impeded in the slightest degree. And why should we disturb the circulation? Can we so apply our dressings as to meet all indications in the treatment and yet not interfere with the circulation? I think we can in nearly every instance.

I am well aware that this is contrary to ordinary teaching, and you may answer that it can be done in but few cases. It will surprise you, however, to find in how many cases, and what fine results you will have without constrictive dressings.

The old and well-tried fracture-box is one of the forms in which the principle is applied partially, but here we have lateral pressure and thus far defeat the plan of avoiding any interference with the circulation. There is for all fractures of the leg and thigh a plan of suspension that meets all requirements. By means of an iron rod properly bent, the so-called Hodgen's splint is a form that can be easily used and is almost always available. It can be made in a few minutes by an ordinary mechanic, or by the surgeon himself if he has the proper mechanical skill to practice his profession. Additional to the rod, a few safety-pins, a piece of cloth to make a suspension for the leg, a cord to suspend the leg when the splint is adjusted, and your dressing is complete. It can be used in all cases of leg and thigh fracture, and can be adjusted to any degree of flexion by merely bending the rod at the knee; extension can easily be applied by adjusting the bed to the point of attachment of the cord to the ceiling. Many surgeons will agree as to its usefulness in fractures of the leg, but if you will study recent reports you will find the best results in treatment of fractures of the femur by this means. There should be no constriction whatever. The patient can move about to a limited degree in his bed, and he can not displace the fragments if the ordinary mechanical principles are complied with.

Compound fractures can be as easily and comfortably dressed as if the fracture were uncomplicated. If a foot-piece is needed, it can be made by cutting in a piece of board at the proper angle, and by means of wedges this can be adjusted to completely support the foot, but in most instances the needed support to the foot is had by making a stirrup of a piece of bandage and attaching it to the splint higher up. I do not insist on this special form of splint, but insist that the principle should be applied, and mention this form only for its simplicity, availability and effectiveness.

A modified form of application of Hodgen's consists in supporting the leg by short strips of bandage fastened on either side, preferably by safety-pins, to admit of free inspection of all parts of the injured limb without disturbance.

For the arm the principle of non-constrictive dressings can be applied in a modified form, either by a trough or in some other simple manner. I use bent wire. In clavicle fractures, by requiring the patient to lie on his back on a firm smooth mattress, all indications are fulfilled and results are excellent.

I need not mention the trouble and anxiety with splints and ordinary dressings, but wish to say that all ready-made splints remind me of attempting to fit every man with one pair of boots. If you must use one, make it for the individual.

Remembering the principle of non-constriction of the limb, the splint applied with plenty of padding and tied on with a very few strips of bandage is much better and far safer than one applied with the ordinary roller with many turns. It is very easy to loosen or tighten the strips, but not easy to adjust the roller without cutting it entirely away.

Plaster-of-Paris splints or casts should never under any circumstances be used for a primary dressing. This may be very radical as a statement, but as a question of practical experience it is abundantly supported by many unfortunate results. Do we consider how rigid a plaster cast is—that it contracts after being applied? How difficult, if it is causing pain or the limb be painful,

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to inspect the fracture or remove the dressing! Then you may ask when to use plaster—only when all swelling has subsided, absorption of extravasated blood taken place, and you wish to give your patient his freedom during convalescence. Practically then, use plaster-of-Paris dressing after the bone has united and you wish to protect the point of injury from possible results of attempting to move about. Another point is, under no circumstances use this dressing without plenty of cotton or other padding next the skin. It is never proper to use plaster-of-Paris without this plentiful layer of cotton.

There are many forms of retentive dressings which come and have a trial and are forgotten. Many of them, like wigan, silicate, starch, wire-cloth and others have advocates, and all are useful, but useful only when convenient. We have these things in mind only to be applied when they are easily reached. But under no circumstances can all fractures be dressed with one form of dressing or one kind of splint. You can find bark or a limb of a tree in the forest, that will make a splint to fit the case in hand, and I believe that every surgeon ought to be able to dress his case of fracture with what he can find on the spot. If he expects to manage such cases successfully, he should have mechanical ingenuity to adapt conditions to his needs and not be helpless because he may not have his favorite dressings with him. But these are all to be considered as temporary and applied to meet the needs of transportation, and in all cases when the patient reaches his home or a permanent residence he should have a non-constrictive dressing and be made comfortable.

I can give positive results from actual experience in many cases with this principle applied, but one of each kind will be more than enough.

CASE 1.—A railroad brakeman had his leg broken by a derailment, a car crushing him. He received an immediate dressing of plaster-of-Paris, and within a short time, from constriction of the dressings, the pain became unbearable and, when first seen by me, the dressing had been cut, the leg was covered with large blisters, was very much swollen and still painful. This visit was at night, but by making a sketch and giving an ordinarily bright young man directions, he brought a splint—Hodgen's—ready for use in less than an hour. After suspending the leg and adjusting the short strips of bandage there was no further trouble, and healing was uneventful.

CASE 2.—An impacted fracture of the neck of the femur was treated with a similar splint and sand-bags, with a good recovery, a useful limb, and no unpleasant symptoms. This patient was a woman, very much emaciated and neurasthenic. She now walks with scarcely a perceptible limp.

CASE 3.—A crushing injury of the leg was caused by a heavy log striking it, in a man of 55, of phlegmatic temperament. He was dressed in a fracture-box at first, applied very loosely, but swelling occurred to such an extent that I was obliged to suspend the leg and remove every form of constriction. Enormously large blisters, filled with bloody serum, extended from the knee to the ankle, the foot was cold, and every appearance of gangrene occurred, yet by suspension and non-constriction I succeeded in getting a result which, being slow—about two months—was as perfect as if in a younger man with a better constitution. In this case there was no possibility of saving limb or life with any form of constriction.

CASE 4.—This was similar to Case 3 in every way, as to constitution and conditions of the system. The injury was a fracture of the malleoli with dislocation. Four hours after the injury I found the patient as free from pain as if he had sustained no hurt; he had slept and was comfortable, and yet there was complete displacement with laceration of all structures at the ankle-joint, sharp fragments of bone pressing dangerously on the skin to such an extent that perforation was almost complete. There was no sensation on reduction. Blisters similar to those in Case 3 formed over the injured parts. Similar open treatment was given, with good recovery in a reasonable time.

CASE 5.—This was a fracture of the middle third of the femur, with contusions of various parts of the body. The patient had been struck by an engine on a crossing. Suspension, non-constriction and healing without shortening was secured.

In some of these cases any form of constriction would have produced disaster, and if we get good results in our worst cases with such dressings, how much better must be the healing powers in the ordinary case. How much anxiety is saved by the ready inspection, ease and comfort and gain in time to the patient!

ACUTE GLAUCOMA DEVELOPING IN A CATARACTOUS EYE, AFTER CATARACT EXTRACTION IN OTHER EYE. IRIDECTOMY AND CURE.

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Among the more serious affections of the eye, there is not one which demands such prompt and proper attention as that known as acute glaucoma, or the so-called green cataract of the early writers. And while it is the usual and every-day facts and phases of a subject which should demand our most considerate attention, yet it is likewise true that we should be cognizant of the unusual and atypical, in order that our mission may be best fulfilled. Such is the excuse for that which is to follow.

Glaucoma is said to be secondary when it occurs as a result of some previously existing disease of the eye; and complicating, when it occurs in the presence of another eye affection, but without apparent etiologic relation to the same. The case in point probably belongs to the latter class, though the distinction is largely a matter of individual opinion.

Exclusive of nationality, the factors which predispose are old age, with its accompanying changes, hypermetropia, and a small cornea. Of these, the first and last were present.

Various theories have been advanced as to the mechanism of the disease, most of which are no longer tenable since the demonstration of the nutrition processes and the path of the circulation of fluids in the normal eye.[1]

A general review of the late literature on the subject leads one to accept these facts: 1. That glaucoma is due to a disturbance of excretion rather than an increase of secretion. 2. That this excretory blockade is accomplished by an abnormally swollen ciliary body pressing the iris-base against the periphery of the cornea, to which it soon becomes adherent, and in this manner causing a retention of fluid by closing the filtration angle. 3. That the only reliable and safe method of treatment is broad peripheral iridectomy, done early and under general anesthesia.

1. De Schweinitz: p. 376.

Noyes[2] says that iridectomy performed in one eye for the relief of glaucoma may occasion the outbreak of acute glaucoma in the other and previously healthy eye, he having seen one instance of this. It is to be presumed that the simple cataract extraction, in a case without evidence of glaucoma, would exert a similar influence, even though the iris was not cut. This fact must be explained by reflex ciliary irritation.

Numerous cases have been reported in which glaucoma followed cataract extraction—either simple or with iridectomy—in the eye operated on, having usually been caused by peripheral adhesions of the iris. Pagenstecher[3] divides these cases into two groups: 1, those in which the process is a direct result of the cataract operation; and 2, those in which it appears after the eye has regained its function. He further says that it occurs more often after the simple than the combined operation, and that it may follow discission.

Dabney[4] reports a case in which the instillation of two drops of a 1 per cent. solution of atropia into the conjunctival sac of a man of 22 years, suffering from a purulent conjunctivitis, induced symptoms of acute glaucoma. In ten days vision had returned to normal. It is interesting to note that the patient's mother had glaucoma.

Treacher Collins[5] studied two cases of congenital and one of traumatic aniridia with glaucoma, in each of which the filtration angle was blocked—in the congenital cases by a stump of undeveloped iris, externally invisible; and in the traumatic case by a pulling forward of the ciliary processes. So much for these unusual traits of glaucoma; but as to the case in point, I have as yet seen no instance mentioned of acute glaucoma in a cataractous eye, following simple cataract extraction of the other eye. Such was the case under consideration. The clinical history is as follows:

Mrs. H. D., an American, 80 years of age, and housewife by occupation, was first seen on Aug. 8, 1900, when she was found to have binocular senile cataract. She gave a history of having lost all vision in the left eye twelve years before, and that in the right eye five months before. She had good light perception over the normal visual field in each eye. On August 13 I removed the lens from the left eye, making a 3 mm. flap, and no sooner was the corneal section completed than the lens appeared in the wound and had only to be lifted out. This occurred, as is sometimes the case, without any pressure being exerted and without capsulotomy, the lens escaping intact—due, no doubt, to the over-ripe and atrophied condition of the lens, and to lack of adhesion of the posterior capsule to the lenticular fossa. By this result we had no fear of cortical remnants, nor of capsular cataract. The usual after-treatment was adopted and recovery was uninterrupted.

On October 5, or fifty-three days after the cataract extraction in the left eye, acute glaucoma developed in the right, with premonitory symptoms for two weeks previously. Tension was increased to +2 or +3, pain severe, paroxysmal in character and worse at night. The cornea was hazy and anesthetic; the iris discolored, dilated to a mere ring, and fixed.

The object of treatment, from the beginning, was not necessarily to save vision, but to give relief in such a manner as to make our patient comfortable for her few remaining years.

After temporizing with instillations of eserin, alone and with cocain, warm boric acid solution as a collyrium, hot compresses, and repeated paracentesis of the anterior chamber through the base, of a large central corneal ulcer which had formed, a broad peripheral iridectomy was made on November 11, under cocain anesthesia—which proved rather unsatisfactory, owing to hardness of the eyeball.

The patient complained of some indefinite pain for four or five days following, during which time the tension was slightly plus. Since then she has been entirely free from pain, with tension about normal. She is wearing a +11.00 sph. over the left eye, which gives a vision of 20/200.

2. Diseases of the Eye, p. 566.
3. Klin. Monatsbl. f. Augenh., May, 1895.
4. Am. Prac. and News, Feb. 16, 1889.
5. Ophthalmic Review, April, 1891.

SITOPHOBIA OF ENTERIC ORIGIN.*

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Sitophobia, meaning fear of food, is a condition which may last a long period of time and, if not successfully treated, may endanger life. It is therefore natural that this subject should command the full attention of the practitioner.

When I first used the term sitophobia I was not aware that Guislain[1] had already employed the same word to designate the refusal of food which is so often encountered in cases of melancholia and in the insane. For this condition, however, the word introduced by Sollier[2], namely, "sitieirgy," meaning refusing food, seems to be more appropriate. For, in the insane, the patients do not want to eat, not because they are afraid of the food, but for different reasons; either they are in a state of depression, unwilling to do anything, even eating, or they have suicidal ideas, or they have illusions that the food may be poisoned, etc. I may be, therefore, permitted to reserve the term sitophobia for those conditions only in which there is distinct fear of taking food on account of resultant bad consequences. Sitophobia in this sense has nothing to do with the insane and is found in mentally perfectly sound people.

In my paper, "The Diet of Dyspeptics,"[3] I have already alluded to the importance of sitophobia and its management.

While, however, in the above article sitophobia is spoken of as occurring in cases of disorders of the stomach, principally those accompanied by pains, of late I had the opportunity to observe the same condition in persons who had no gastric symptoms whatever and in whom "the fear of food" was due to some intestinal difficulty. I shall, therefore, in this paper speak of the latter group of cases, or of "stophobia of enteric origin."

A good illustration of the importance of this condition will be found in the following case, which I beg to describe:

William H., 28 years old, bookkeeper, had always been well up to two and a quarter years ago. At that time he became constipated, which condition gradually grew worse, occasionally alternating with diarrhea. Off and on, mucus was observed in the stool. His appetite was good, but he suffered at times from headaches and disturbed sleep. Patient consulted me for the first time in March, 1900, and was given magnes. usta in conjunction with ferratin and olive oil enemas, after which he improved for awhile. He went to the country, where his condition again became worse. On his return to the city, in August, patient was given podophyllin pills, which, however, did him no good. He then went to another physician, who ordered some medicine and injections of water.

These remedies not proving of benefit, patient again resorted to the podophyllin pills and injections every day, using both these means from September, 1900, to March, 1901. Often he would go without a movement of the bowels for seven to ten days. During all this time he ate much less than he was previously accustomed to, because he was afraid "that he would get entanglement of the bowel." His weight steadily grew

* Read before the New York Academy of Medicine, May 16, 1901.

1. Guislain: Eulenberg's Realencyclopädie der Medicin, 1887, Bd. xii, p. 696.
2. Sollier: Revue de Medecine, aout, 1891.
3. Max Einhorn: Medical Record, Jan. 1, 1898.

less, and dropped from 138 to 101½ pounds. He became exceedingly nervous, irritable and hypochondriacal. Of late he felt so weak that he had to abandon his vocation. At this time (March, 1901) he again consulted me, looking very badly, and being hardly able to walk. After undressing he looked almost like a skeleton, every bone being visible, not unlike a Roentgen picture.

On examination, besides this extreme condition of emaciation, pronounced anemia was found. The thoracic organs did not present anything abnormal, while the abdominal cavity appeared somewhat caved in (almost trough-like) and showed an "apparent tumor," situated above the navel to the left of the spine. There were no areas painful to pressure. The urine contained neither sugar nor albumen. The knee reflex was present.

The diagnosis of emaciation due to inanition without any organic trouble was made and the patient treated accordingly. He was advised to eat six times a day; a rectal injection of a pint of warm olive-oil was ordered every night, and he was given internally calcined magnesia and ferratin. He was told to eat plain, wholesome food, plenty of fruit, bread, and at least a quarter of a pound of butter daily. He immediately improved; his bowels became regular, and hardly a month later he weighed 128½ pounds, having gained on an average almost a pound every day. He now looks the picture of health, has ruddy cheeks, feels strong, and is able to take long walks without any fatigue.

Another case not unlike the one just described is the following:

Joseph W., 23 years old, ladies' tailor, had been suffering for the last two years with digestive disturbances (fulness after eating and constipation). Six months ago he consulted me, complaining principally of severe constipation. He was given tincture of rhubarb, but his condition did not seem to improve much. The appetite was not especially good and the constipation became more obstinate. He was afraid to eat much, as he believed the more he ate the more he would be constipated and the sooner he would have to resort to a cathartic. He ate everything, but only in small quantities. He was also compelled to take a glassful of whisky in the morning on an empty stomach and two to three times during the day in order to be able to do his work. He gradually became weaker, and lately lost 15 pounds. His weight now is 110 pounds.

On examination, patient is found to be emaciated and pale. The thoracic as well as the abdominal organs do not reveal anything abnormal. The tongue is not coated. Urine contains neither albumin nor sugar. Patellar reflexes are present.

The diagnosis of habitual constipation with sitophobia was made and the patient treated accordingly.

In the two cases above detailed the sitophobia developed as a sequel to obstinate constipation. The patients were afraid to tax the intestinal tract with much food, as it was apparently unable to dispose of even small quantities of the most delicate aliments.

I have, however, seen instances in which chronic diarrhea also gave rise to sitophobia. Of the many cases I have observed I will report only one.

Mrs. N. O., about 33 years old, had been complaining for the last four or five years of great flatulency and diarrhea. She had four to six movements daily and one or two during the night—about 3 or 5 a. m.. The dejecta were either watery or mushy, and always contained a considerable amount of mucus. Before an evacuation took place there was always a great deal of rumbling in the bowels, accompanied by slight colicky pains and passing of flatus. Her appetite was fair and there was no discomfort after meals. Patient, however, was very careful in her diet, taking principally mutton broth, scraped beef and toasted bread, and of these very small quantities. She was afraid of aggravating her trouble by partaking of more food. Patient had constantly lost in flesh in the last two years, altogether about 40 pounds. She feels weak, complains a great deal of dizziness, a dry sensation in her mouth and restless sleep, and is unable to attend to her household duties.

The physical examination shows that a condition of enteroptosis prevails. The gastric contents do not reveal anything abnormal. The fecal matter contains some mucus and a considerable quantity of undigested food.

The diagnosis of enteroptosis and chronic enteritis is made. Patient is put on a liberal diet—salads, fruits and coarse vegetables excepted—she is permitted to eat everything. She is also instructed to partake of kumyss, and bread and butter between meals. Besides the diet, patient is given tannigen (seven and a half grains three times a day). Under this régime she has steadily improved, gained considerably in weight, and her bowel trouble has almost yielded to a great extent, although it has not entirely disappeared.

Remarks.—In the observations just narrated the sitophobia was marked and had its origin in the belief that the bowel trouble might become aggravated by partaking of nourishment to some extent. Nor are these cases rare. Sitophobia of a moderate degree is almost an every day occurrence in various intestinal disorders.

Having emphasized the fact that sitophobia is met with in enteric affections, it does not appear superfluous to describe its dangers and also its treatment.

While in conditions accompanied by diarrhea the avoidance of food may for a short while exert a beneficial influence upon the intestinal affection, it is quite different in most cases of habitual constipation. The latter condition becomes the more aggravated the less food is taken. The constipation growing more pronounced, the patient is still more afraid to partake even of the small quantities of food which he has hitherto managed to enjoy. Thus there is a circulus vitiosus: constipation causing sitophobia, which of itself aggravates the former affection.

But even in diarrhea, with sitophobia causing an insufficient quantity of food to be ingested, there is, after a short interval of apparent improvement, a relapse. The deficient nutrition leads ultimately to an undermining of the constitution. The natural resources for combating disease are weakened; nervous symptoms manifest themselves. Thus the diarrhea quite soon is again as bad as ever.

Moreover, sitophobia, no matter what be its cause, if left to itself is bound to endanger life. A person who habitually is taking an insufficient quantity of nourishment is slowly starving, and if there be no change in the mode of living, starving to death.

It is hardly necessary to dwell upon the symptoms which appear in this state of subnutrition. They are a host and hardly need any comment: general anemia, and then anemia of the brain, dizziness, dryness in the throat, extreme fatigue, insomnia, etc. Occasionally I have met with albuminuria, which promptly disappeared upon improving the nutrition.

Another important feature of sitophobia is the habit which the patient develops of eating minute portions.

The condition which has led to sitophobia may have been remedied and thus the sitophobia as such may not exist any longer, still the acquired habit of eating very little may persist. This certainly can produce the same dangers to life as the original sitophobia.

Treatment.—The patient must be made to eat sufficient quantities of food, no matter what is the underlying condition causing the sitophobia, and no matter how this is done. Sometimes persuasion alone is sufficient. Occasionally in very pronounced cases of subnutrition an ample diet can not be adopted at once, but must be arranged gradually, accustoming the patient to more nourishment step by step. In some instances various medicaments will be helpful in carrying out this plan, thus the bromids in nervous conditions, or codein in painful affections. Sufficient nutrition is the foundation upon which to build the structure of health. The former lacking, no matter what treatment may be instituted, the structure will sooner or later collapse. If a solid foundation is laid by a sufficient diet, it is often quite easy to achieve perfect recovery. For, the usual means of treatment will then prove successful in eradicating the primary disease.

THE RELATION EXISTING BETWEEN DISEASES OF THE CONJUNCTIVA, NOSE AND THROAT.

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My purpose in selecting this subject is not that I have any thing especially new or original to offer, but rather because I feel certain that in our text-books and literature too little time and space are devoted to the intimate association which exists between the conjunctiva, nose and throat, and as a consequence, faulty results are sometimes obtained in their treatment. From an anatomic standpoint, we admit a close relation through the lachrymal channel, and accept this as a most intimate and direct means of communication between the nose and conjunctival cul-de-sac, and do not hesitate to ascribe to certain conditions found in the nasal cavity the cause of disease so frequently found in the lachrymal sac and canal. It is not, however, to this direct means of communication, and the generally accepted lachrymal diseases, which I desire to call attention, but rather to the class of cases more frequently met and to which less importance is placed upon this factor of association between the conjunctiva, nose and throat.

Relatively speaking, conjunctivitis in all that the term implies embodies as large and perhaps a larger variety of manifestations than any other disease in the domain of ophthalmology. Mere mention of the classification of conjunctivitis found in our text-books to-day is sufficient to emphasize the above.

And, then, as we turn to our text-books on diseases of the nose, nasopharynx and throat, we are again surprised at the varied manifestations of disease found here, admitting, therefore, that the conjunctival cul-de-sac and the nasal cavities are alike so frequently involved in inflammatory change, with the intimate means of communication existing between these two tissues (via the lachrymal channel), etc., why should we not expect an association of tissue change? Besides the continuity of membranous tissue existing between the nasal cavities and conjunctiva, we have also an equally intimate association existing through the nerve and blood supply, and it might not be out of place at this time to review for a moment the blood and nerve supply of these parts, that we may the more readily comprehend their association. Granting to the lachrymal canal a direct means of communication, we find that the mucous membranes of the nose and conjunctiva are supplied alike, by sensory nerves derived exclusively from the fifth or trifacial nerve. The upper half of the conjunctiva is supplied by the ophthalmic division of the trigeminus, and the lower half by the superior maxillary division, the nasal branch of the ophthalmic division of the fifth passing from the orbit by way of the anterior ethmoidal foramen, to the anterior nasal fossa, supplies this fossa and the anterior one-third of the superior turbinals (Sappey and Morris), while the entire remaining part of the Schneiderian membrane is supplied by the nasal branches of Meckel's ganglion, the sensory roots of this ganglion are derived exclusively from the second division of the fifth, while other nasal and descending branches of this ganglion supply the soft palate, uvula, nasopharynx, tonsils, orifices of the Eustachian tube, and Rosenmueller fossa. Thus we see there is established a most perfect ramification of one and the same nerve (or branches of the same), reaching from the upper conjunctival tissue to the base of the tonsil. Through the circulatory media we have also a more or less intimate association of the conjunctival cul-de-sac and nose, though not so intimate as the nerve supply. We find from the internal carotid artery the ophthalmic branch entering the orbit, giving off the lachrymal, frontal and palpebral arteries, which supplies blood to the major portion of the conjunctival cul-de-sac, while from the same ophthalmic branch we find the anterior and posterior ethmoidal arteries passing through their respective canals into the cranial cavities here, after supplying in part, the ethmoidal cells and dura, pass downward to the nasal cavity to supply the superior and middle sulcus of the anterior nasal fossa, as well as the anterior halves of the superior and middle turbinal bones. The remainder of the nasal mucous membrane is supplied by the spheno-palantine and descending branches of the internal maxillary (Zuckerkandel), with a possible communication existing between this and the angular artery, through the foramen of the nasal bone.

From the standpoint of the venous circulation, we likewise find fairly intimate association existing between the conjunctiva and nasal cavity. We find a circle of veins completely surrounding the orbit—a perfect network or reservoir, derived from the lachrymal, supra-orbital, frontal, nasal, angular and transverse facial, draining the upper and lower eyelids and their conjunctiva, and the angular vein lying upon the internal palpebral ligament, possibly receives a vein through the foramen of the nasal bone, from the anterior nasal fossa (Gray and Quain). In the nasal cavity the veins form a deep venous plexus, over the inferior turbinal and posterior portion of the middle and superior turbinals, as well as lower and posterior portion of the septum, almost the entire plexus, drained by the spheno-palatine vein. We find also a similar dense plexus extends around the nasal duct as far upward as the lachrymal sac, establishing a very intimate relationship between the mucous membranes of the nose and conjunctiva, through the lachrymal canal.

It has also been suggested that a more or less direct communication between the conjunctiva and nose exists through the lymphatic, but according to Gray, Morris,

Testute, Quain, Henley, Cunningham, Heath and Deaver, no evidence of either direct or indirect association exists, as we find the Schneiderian membrane discharges its lymphatics into those channels, following the internal maxillary artery, ending in the deep lymphatics of the neck (Gray).

Admitting, therefore, that the lymph channels play little, if any, part in common in the disturbances under discussion, we do admit a more intimate association by means of the arteries, and a still greater one through the venous association, while the nerve supply for each is practically one and the same, and added to this is the lachrymal canal so generally accepted. How, therefore, can we underestimate the importance of the association of disease in the nose and conjunctiva, and as a most plausible explanation for this association, in the greater number of instances we should and most naturally do look to the most intimate means of connection between them, which (excepting the lachrymal canal), we must admit to be, through the nerve supply, and excepting certain well-established disturbances, such, for instance, as lachrymal blenorrhea, etc., due to membranous continuity, it would seem that nerve reflex is our most plausible theory by which to explain the greater number of disturbances so frequently met, existing alike in the nose, throat, and conjunctiva, which theory I am forced to believe from my increasing daily experience. It is true that we must ascribe to venous stasis or impaired return flow of blood a prominent place in the production of many catarrhal manifestations in the conjunctiva, resulting directly from nasal hypertrophies and the circulatory disturbances arising therefrom, which can be readily understood when we recall especially the venous circulation as it exists in these parts. A very admirable reference of this circulatory disturbance in the nose is mentioned by Dr. Edwin Pynchon in an article on "Impaired Ventilation and Drainage of the Nose as the most common Causes of Nasal Catarrh." Granting the immediate cause in this class of cases to be circulatory, who can estimate the part played by the nerve reflex as well?

Cases illustrative of the purpose of this paper are too numerous to mention. How frequently, for instance, is the ophthalmologist baffled in his treatment of both acute and chronic conjunctivitis, marginal lid troubles, etc., until proper attention has been given to an existing rhinitis or pharyngitis? One of the most common illustrations of this is found in phlyctenular conjunctivitis. Here, no sooner is one attack of phlyctenules relieved, when the child is seized with a new cold and, the conjunctivitis is lighted up anew, with more phlyctenular ulcers perhaps. This goes on, spring and fall, despite the ophthalmologist's best efforts, until the adenoid vegetations, pharyngeal tonsils or nasal hypertrophies, one or all, have been relieved. Whether the association of these diseases in the conjunctiva and nasopharynx in circulatory (impeded circulation) or nervous, or both, is immaterial; the intimate association is plainly verified by the treatment, and to the physician who disputes it, let him refer to his records of cases cured, without due attention, not only to the conjunctival disease, but to that as well in the nose or nasopharynx.

Another condition which is equally illustrative of this intimate association is chronic conjunctivitis. Here our patient suffers with lid trouble for months, and perhaps longer, benefited temporarily, to be sure, by careful treatment to the conjunctivitis, to be harassed by an exacerbation of the conjunctivitis on the slightest exposure, when upon examination of the nose we find more or less complete nasal obstruction from hypertrophies, due, perhaps, to septal ridges, spurs or deflection, or on examination of the throat a chronic pharyngitis with tonsillar hypertrophy.

It is my daily experience, and I am sure it is that of others, to have these cases to deal with, and no permanent relief is obtained until due attention is given to the nose and throat, as well as to the conjunctiva. I have in mind a case which is very illustrative of the conditions under discussion: A. W., 18 years of age, consulted me in April, 1899, suffering from conjunctivitis, from which he stated he had been a sufferer several times yearly for about four years, and which always returned when he suffered from a cold. The conjunctivitis was general, involving both eyes, confined to the bulbar as well as the tarsal conjunctivæ, with decided swelling of the membrane—a perfect picture of acute conjunctivitis. On examination of the nose I found complete stenosis of right nostril from turbinal hypertrophy and extreme displacement of septum to right, with marked hypertrophy of lower and middle turbinals and entire mucous membrane of left nostril. Upon questioning I found that before receiving a broken nose in a game of football four years previous, he had never been troubled with sore eyes. Since correcting the nasal defect, as completely as possible, which I did a month later of the same year, the young man has only suffered one attack of sore eyes (conjunctivitis), which was in March of the present year.

I speak of this case especially, because it is one in which the eye trouble dates distinctly from time of injury to the nose, and a practical cessation of attacks of conjunctivitis followed the correction of the injury to nose; and, further, because it is quite evident that the considerably increased blood supply to nose accompanying a cold, and the impairment in its free circulation from swelling, and mechanical misplacement, precipitated his attacks of conjunctivitis. But it is not always true that marked stenosis of the nasal fossæ is necessary in order to excite conjunctival irritation; nor that all nasal stenoses of greater or less degree do excite conjunctivitis. We sometimes find apparently insignificant disturbances in the throat and nose closely associated with, if not a causal factor in, conjunctival irritation, i. e., how frequently when suffering from an apparently mild post-nasal pharyngeal irritation are we annoyed by a similar mild but annoying conjunctivitis? Especially aggravated is this in the morning, after a night's sleep, which latter symptom is undoubtedly due to faulty circulation (more or less sluggishness or impairment in circulation), favored by the horizontal position of the body from the night's sleep. Another evidence of this association is the picture, familiar to all, seen in hay fever. No less is the irritation or inflammation found in the nose than that found in the conjunctiva, but it may be said that this is a constitutional condition, affecting both membranous expanses alike, or that it extends, by continuity of membranous tissue, from the nose to the eye, or that it is reflex, but it matters not, the inseparable association of the two serves to emphasize this subject.

But we are more ready to ascribe to septal deflections, inferior turbinal hypertrophies, ordinary colds, hay fever, etc., an association with conjunctivitis than we would be to concede to the middle turbinated body a cause for the production of conjunctivitis, because the middle turbinal is less commonly considered a disturbing factor in the nose, and for this reason I desire to mention a case, which I treated for conjunctivitis in

1899: M. S., aged 24, referred to me by a rhinologist, who had the lady under treatment at that time for hypertrophy of the left middle turbinal, which was in intimate contact with the septum. She consulted me for the relief of a more or less constant redness and irritation of left eye, and to avoid an erroneous conclusion in the mind of the reader, that the operative interference in the nose might possibly be the exciting cause of the eye irritation—let me say that the eye trouble had existed for a long period previous to consulting her rhinologist. The suggestion at the time of examination that the conjunctival disturbance might entirely disappear upon the relief of the nasal disorder was fully verified, for as the encroachment or pressure of the turbinal against the septum was relieved her eye trouble became less, until now, for the past year, she has had practically no conjunctival irritation whatever—illustrating to me very clearly that it is not necessary to have nasal stenosis or a general hypertrophic condition in the nose in order to produce a conjunctival disturbance, but rather, as in this case, only one comparatively small focus of irritation may excite, purely by nerve reflex, a very marked disturbance in the conjunctiva.

I might go on indefinitely and mention cases to illustrate the purpose of this paper, but it is unnecessary. Personally, I have always been impressed with the importance of the association of diseases of the Schneiderian and conjunctival membranes, and when one stops for a moment to consider their intimate anatomical relations, which I trust the reader will pardon me for recalling so in detail, I am quite certain my reasons for being so impressed will appear well founded, and when the ophthalmologist, in treating conjunctivitis, will constantly bear in mind that he is not treating an isolated tissue, but rather one which is by continuity, blood and nerve supply, inseparably related to other structures—equally and even more exposed to disease—the problem becomes a more simple one and the results of treatment more satisfactory.

103 State Street.

ROUND LIGAMENT VENTROSUSPENSION OF THE UTERUS.*

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ARGUMENT.

1. All suspensions of the uterus, of whatever kind, are makeshifts. 2. Anchorage of the uterus by means of the round ligaments is the nearest approach to the ideal. 3. As a choice between evils the round ligament suspension is superior to all others, both from a physiological and utilitarian standpoint. 4. The author's method and its advantages.

There is not, and never will be, an ideal suspension of the uterus in the sense that it meets all the requirements of a mobile organ, untrammelled in its functions and held within physiological limits. The nearest approximation to this condition as applied to the retroposed organ is found in the shortening of the round ligaments as devised by Alexander, and the nearest approach to an ideal operation for effecting this shortening is the modification of the Alexander operation as devised and practiced by Kellogg. But this is not a suspension in the common acceptation of the term—it is rather an anchorage. The Kellogg operation, while beautiful, safe, efficient, and in the hands of its author, easy of execution, requires skill and training for its execution and will never become popular on account of the difficulty in finding the ligaments. It is not applicable to the majority of cases demanding operative interference, in that it makes no provision for liberating the adherent uterus. Supplemented by abdominal section, whereby the adhesions may be overcome, it leaves nothing to be desired. The intraperitoneal shortening of the round ligaments by doubling them upon themselves is fundamentally defective in that the slender and weak distal extremity of the ligament is relied on to sustain the uterus, which the stronger ligament in its primitive form was incapable of doing. None recognizes this fact better than he who has practiced the Alexander operation and has oftentimes found this part of the ligament not larger than a violin string. The Kelly ventrosuspension operation has much in its favor in that it is easy of execution and usually stable in its effects. But it is open to the objection of rendering the uterus practically immobile if it is to be of permanent advantage, or failing this the uterus gradually draws away and finally sinks unrestrained into its former abnormal position. The Kelly operation, as is now well known, often leads to serious embarrassment in pregnancy and occasionally offers insuperable obstacles to parturition. My experience with the operation has been quite extensive and has embraced a period of years. I have found it in the main effective in keeping the uterus anteposed, and have seen less evil resulting from parturition and pregnancy than is generally credited to it. Very recently I found a woman in the hospital on whom I had performed the operation some four years ago, and who in the mean time had borne three children. She stated, in answer to my queries, that she had experienced no bad effects in her pregnancies or in labor. I found, on examination, the uterus firmly attached to the anterior abdominal wall, and that it was in perfect involution—her babe being five months old—but that she was suffering from one of the most extensive cervical lacerations that I had ever witnessed. The Kelly operation is beautifully adapted to the postclimacteric woman and to women who have been rendered sterile by removal of the uterine appendages.

The various operations for fixation of the uterus—vaginal and abdominal—are open to the same objections as the Kelly operation, and most of them have fallen into disuse. The need of the hour is an operation that will utilize the natural supports of the uterus, that will insure a certain amount of mobility, that will adapt itself to the various functions of the uterus—pregnancy and parturition—and that will be lasting in its results and withal easy of execution. We know that the round ligament grows *parra passu* with the development of the uterus in pregnancy, and that it returns to its primitive condition after parturition. I have recently had to remove a uterus in the fifth month of pregnancy, and in that case the round ligaments were developed to the size of the little finger and were long enough to be lax with the fundus at the umbilicus. We have all seen such things repeatedly, but having the subject in mind at the time I took special note of the condition of the round ligaments in this case. Theoretically the same changes should occur in the ligament which had been implanted in the abdominal wall. It is but just to say that the idea of implanting the round ligaments in the abdominal wall originated with Ferguson, and it was from him that I received my first hint. I had.

* Read before the American Association of Obstetricians and Gynecologists, at Louisville, Ky., Sept. 18, 1900.

however, on one occasion previous to this, sutured the round ligament to the peritoneum in the same relative position, but as I was not able to follow the case up I am unable to say with what result. There are, however, to my mind some objections to the Ferguson operation in that he cuts the ligament and thus destroys its continuity. He also makes two lateral incisions in the deeper structures of the abdominal wall, which have to be sewed up. Furthermore, he uses a sound in the uterus to support it while operating.

This latter requires a trained assistant and is not devoid of possible injurious effects.

STAGES OF OPERATION.

The steps of the operation as modified by me are as follows:

1. *A median abdominal section.* This section is from three to four inches long and at the usual site between the umbilicus and pubis.

2. *Break up the adhesions and bring the fundus forward.* After which the patient may be placed in the Trendelenburg position.

3. *Seize the round ligament on one side and bring it to the opening.* The ligament may be picked up between

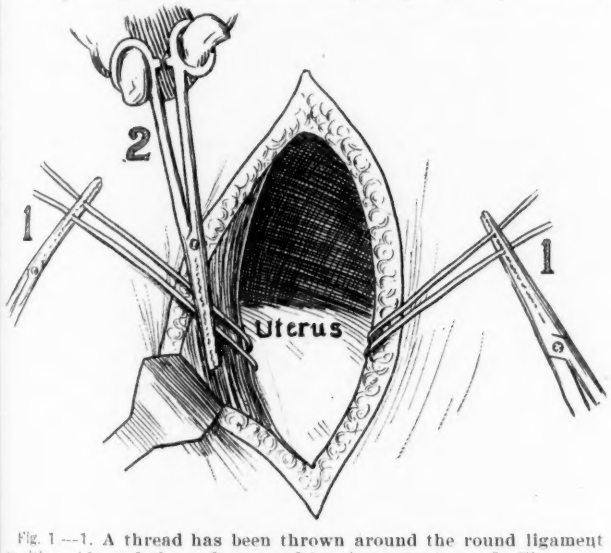

Fig. 1.—1. A thread has been thrown around the round ligament on either side and the ends secured by clamp forceps. 2. The overlying tissues are retracted and the perforating forceps applied to the surface of the rectus muscle, through which it is thrust into the cavity.

the thumb and finger, or by the aid of a bullet or blunt forceps. At the onset of my work in this line I had forceps specially constructed for the purpose, known as the button forceps, but which of late I have practically discarded as being unnecessary.

4. *Carry a silk thread under the ligament at a distance of about one and one-half inches from the uterus.* This can be most conveniently done with an aneurysm needle, though an ordinary needle answers the purpose very nicely. This forms a loop under the ligament, which is not to be tied, but after withdrawing the needle the two ends are brought out of the abdomen and secured in the bite of a snap forceps.

5. *The other round ligament is secured in the same way and the ends of the thread brought out of the abdomen and held in the bite of another snap forceps.*

6. *Catch up with a volsellum the fascia, muscle and peritoneum at the margin of the incision and an inch or so from the lower angle of the same and make traction.* This pins the layers together, prevents retraction of the muscle and facilitates the next step.

7. *Thrust the perforating forceps* (specially devised for the purpose) *through into the peritoneal cavity and seize the thread which holds the round ligament.* The perforation is made slantingly, the forceps entering the fascia one-half inch from the edge and emerging on the peritoneal surface from one-half to three-fourths of an inch farther from the edge. The handle of the forceps is next tilted outward, which everts the lip of the incision and brings into view that end of the forceps which is in the cavity. The jaws are opened and the thread placed between them.

8. *Remove the clamp forceps from the thread and withdraw the perforating forceps.* This brings with it the thread and the thread in turn brings the ligament through the perforated wound in the abdominal wall.

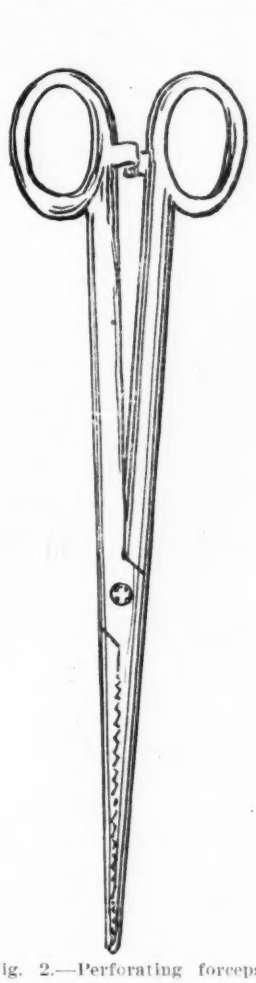

Fig. 2.—Perforating forceps.

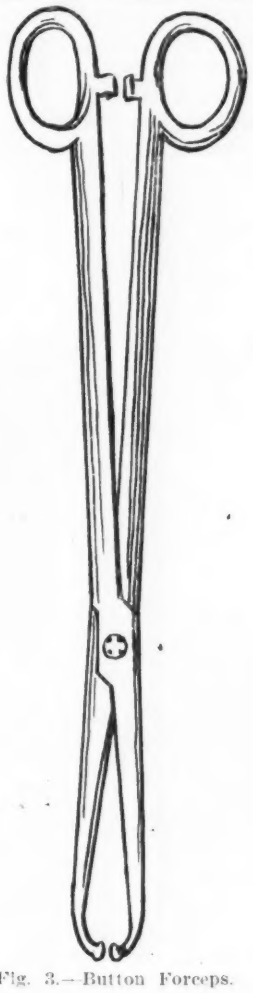

Fig. 3.—Button Forceps.

9. *While the ligament is held taut fasten it into the wound.* This is done by a catgut suture which is passed through its base including the tissues on either side, then back again where it is tied. The thread which held the ligament is cut close to the ligament on one side and withdrawn. This, to prevent infection by pulling through the ligament that portion of the thread which had been exposed.

10. *Treat the opposite side in the same manner and close the median abdominal incision.* The projecting free ends of the ligaments are gathered up en route by the running catgut suture which closes the fascia and drawn to the middle line.

A defect in my operation as originally devised was in gathering up all the slack of the distal extremity of the ligament. This in some cases gave rise to a tensive, drawing feeling that was quite uncomfortable. I now merely

take up a small loop of the ligament, or just sufficient to project above the surface of the rectus muscle. Formerly I had rather an elaborate technique in the way of suturing the ligament so that it might not retract into the abdomen. Experience has taught me that such precaution is unnecessary. I now merely pass a catgut suture through the ligament in one direction and back in the other and tie the two ends. I have recently had to curette a case on which I had performed the operation in the early part of May last, and in doing so drew down the uterus so that the cervix protruded from the vulva. On removing the forceps the uterus crawled back into the pelvis and in a few moments had resumed its normal position. As to the possibility of incarceration of the bowel between the uterus, round ligament, and anterior abdominal wall I regard the chances as exceedingly remote. Strangulation I regard as utterly impossible. In a demonstration of the operation before the members of the Ohio Medical Society, in May last, I passed the four fingers of my right hand into this opening after completing the operation. In a recent contribution by

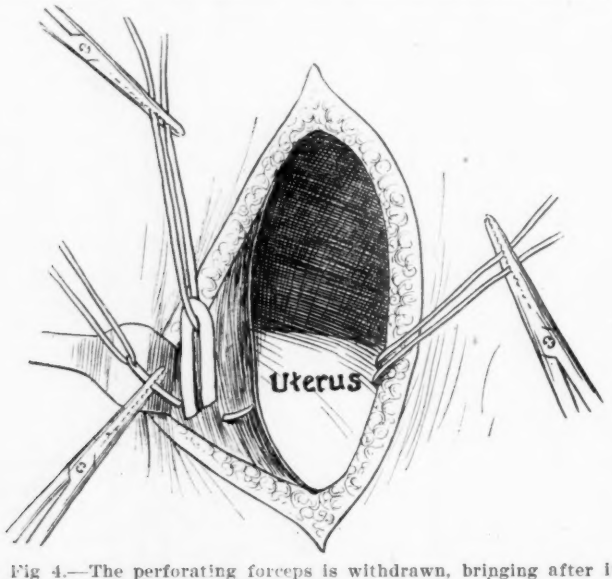

Fig 4.—The perforating forceps is withdrawn, bringing after it the round ligament, through the base of which a suture is being passed.

M. Richelot, he recommends that the round ligaments be drawn up over the fundus and stitched into the lower angle of the abdominal incision. Here I should fear strangulation, as the space between the uterus and ligaments is so limited. That the bowel may insinuate itself in front of the uterus is a fact well attested, although it must be admitted that such an occurrence is very rare under normal conditions. In one case of my own the operation of ventrosuspension was followed by obstinate constipation and distress in the hypogastrium, with gaseous distension of the bowels. Suspecting that some coils of intestine had found their way between the uterus and abdominal wall, I directed the patient to assume the knee-chest position, which relieved the condition.

In conclusion, I wish to say that the careless and unclean operator will almost assuredly be disappointed in this operation, as suppuration is prone unless the most scrupulous aseptic detail be adhered to. Not only should there be a careful preliminary cleansing of the parts, but there should be frequent ablution of the hands during the operation, and it should be the aim of the operator to handle the parts as little as possible and to complete the operation as expeditiously as consistent with good work. I desire to say, furthermore, that increased experience with the operation confirms all my preconceived notions as to its value and adds to my desire that it should be more generally known and practiced.

MAGNETIC FOREIGN BODIES IN THE EYE.

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The class of patients with whom we have to deal in our subject may be said to belong for the most part to laborers or mechanics, whose daily occupation requires that they strike steel upon steel or steel upon iron as the case may be.

We may speak of steel or iron interchangeably. Either causes deflection of the magnetic needle; each can be located by means of the Röntgen rays; both are attracted by the magnet, and the one is as destructive as the other.

Small particles of iron or steel are occasionally found loose in the conjunctival sac. When seen there they have usually first struck and probably loosely imbedded themselves in the cornea or bulbar conjunctiva and afterward become dislodged. They are then principally found just under and a little above the margin of the upper lid and are naturally easily removed.

Small chips of iron or steel are frequently found imbedded in the cornea—they then cause considerable pain, lachrimation and photophobia. If located in the horizontal meridian or a little below it the degree of pain may be lessened by the patient's constant effort to limit the act of nictation, thus keeping the eye open as much as possible, thereby diminishing the amount of irritation caused when the lids are in contact with the foreign substance. Such particles of iron may be overlooked by the patient or his friends. If left alone they rust and cause more or less infiltration and frequently are the seat of infection. We are enabled to detect them in good daylight or by means of focal illumination —still more definitely by the use of a corneal magnifier. If loosely imbedded, we may use a probe around which is wrapped a piece of absorbent cotton, moistening it and wiping the foreign body off. If firmly imbedded, the cornea should be anesthetized either with cocain or holocain, the eye steadied with the fingers and under good illumination the foreign body removed with a spud or gouge made for that purpose. Or we may loosen the particle and apply a strong magnet. If rust is present it is well to remove as much of it as possible.

If the foreign body is deeply located in the tissues of the cornea, we should, if necessary, cut the overlying portion with a small cataract knife and then apply a strong electromagnet. In this way we lessen the possibility of further injury to the cornea or of having a sharp piece of iron penetrate into the anterior chamber during the process of removal.

The importance of strict asepsis in all cases can not be over-estimated. If infection is already present, we should use an antiseptic and then irrigate with an aseptic or mildly antiseptic solution. If much irritation is present, instill atropin and apply a pressure bandage.

Small sharp pieces of iron are occasionally found imbedded in the sclera. Owing to its elasticity and density, it, in many cases, resists the impelling force of the foreign body sufficiently to prevent penetration, or, on the contrary, it is entirely penetrated by it. It is

as a rule easy to locate and remove these pieces of iron from the sclera.

Before considering the more complicated subject of injuries due to penetration by, and retention of, the magnetic body, we will speak of the history and diagnosis of such cases. The patient, perchance, tells us that he has been working with hammer and chisel, and that upon striking a blow something hit him in the eye. Occasionally bystanders are the recipients of small pieces of steel in the eye. Many times patients try to assure us that nothing has penetrated the globe. They complain often of having only comparatively slight pain; of photophobia, lacrimation, together with more or less diminution of vision. We may find only a linear scar, the edges of which are already in apposition.

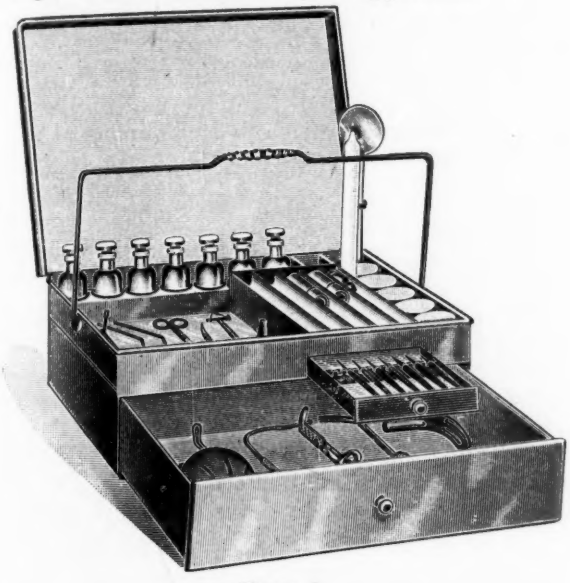

Figure 1.

After examining the eye well in good daylight, we determine approximately the amount of visual acuity —field of vision—then examine under focal illumination and with the ophthalmoscope. Next in order is the sideroscopic examination. The value of the sideroscope in determining the presence of iron in the eye, and too, its approximate location, is much underrated. Dr. Thomas Pooly of New York was the first to use the compass needle in determining the presence of iron in the eye. All sideroscopes have been modifications of

NOTE.—It has been noticed, when too late to change, that the accompanying cuts belong to a different article. Dr. Appleby's cuts were mislaid and the error was not detected until too late to make correction.

his. In 1894 Asmus devised one which has been successfully used up to the present time, but as it is somewhat complicated in construction, it requires the services of a good assistant for its successful employment. I have seen Professor Hirschberg get brilliant results with this instrument of Asmus's, and two years ago it was my pleasure to see him demonstrate, before the Berlin Ophthalmological Society, a sideroscope designed by himself. Its mechanism is simple and it gives excellent results. In structure it consists of wood, brass and glass. There are two substantial wooden brackets which should be firmly attached to a solid wall running north and south, or nearly so. Upon the upper bracket is an adjustable upright standard, the upper part of which consists of a glass tube. In the middle of the standard is an oblong chamber of brass on each end of which is fastened a small glass capsule. In the upright tube is a fine brass thread attached above to a revolving screw. On the end of the thread hangs a magnetic needle, upon the middle of which is fixed a small mirror. Upon the lower bracket swings a standard, bearing a lamp, rays from which pass through a strong lens on to the mirror of the swinging needle. A graduated scale is placed in position and the lamp so adjusted that the reflected rays fall upon a graduated screen.

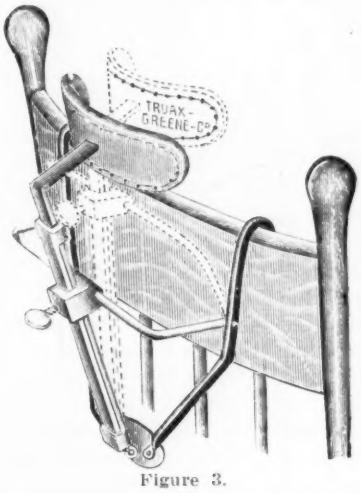

Figure 3.

For convenience of expression we may divide the eye vertically and horizontally, thus giving us four quadrants, an upper and lower nasal and an upper and lower temporal quadrant. Cut No. 1 shows the glass rod—within which is balanced a magnetic needle—as being almost in contact with the eye at about the juncture of the lower and middle third of its lower nasal quadrant, 7 mm. from the sclerocorneal junction. Here we find the needle gives the greatest reaction which,

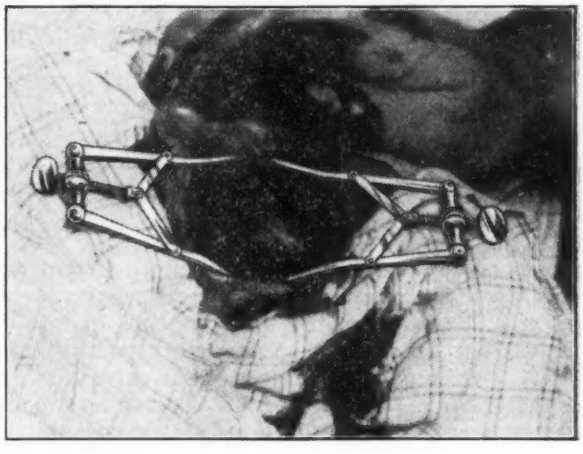

Figure 4.

as the indicator shows upon the screen, measures 4 degrees. If we get little or no reaction of the needle when applied to an eye in which we have good reason to believe iron is present, we should bring the patient's eye into the field of a strong electromagnet. This magnetizes the retained iron and consequently results in its giving a better reaction when the eye is again brought into the field of the needle.

In no case should we undertake an extraction nor should we even cause dislodgment of a chip of iron until we have if possible determined its location and relative size. In order to do so it will frequently be necessary to utilize the Röntgen rays. The first foreign

body removed successfully after location with Röntgen rays was reported by Williams.[1] De Schweinitz, Hansell, Sweet, Oliver, Percy, Friedenberg and others have since reported favorable cases.

In order to obtain good results in *x*-ray work,[2] the head and eye of the patient must be kept motionless during exposure. This is best accomplished by having the patient lie upon a table designed for that purpose. The eye should be kept closed. Knowing that the rays travel in straight lines, we endeavor to place the tube and plate in such a position that we get a bitemporal skiagraph and also one taken in a fronto-occipital direction.

Before making an exposure in the bitemporal direction, four pieces of fuse wire, each 6 mm. in length, are placed—and held in position by means of ordinary court-plaster—over the temporal region of the eye so that the enclosure represented between their inner ends corresponds to an area a little larger than that corresponding to the lateral area of the eye. These pieces of fuse wire show distinctly on the plate after development.

If there be upon the plate more than the four regular outlines of the wire, we know we have a foreign body, and, moreover, we know its approximate size, location and shape as seen from this direction. We may still better locate it by placing a piece of paper cut exactly

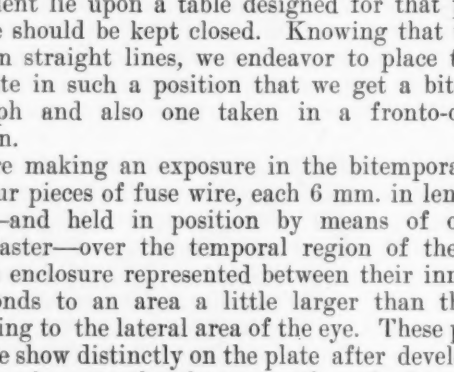

Figure 5.

the size of the normal eye upon the plate between the four artificial landmarks, and mark upon it the location of the foreign body. Then, in turn, we place the paper over the area between the landmarks upon the patient, then designate the location of the foreign body by means of an anilin pencil.

In the anteroposterior exposure two pieces of wire may be used. They are placed, one upon the upper, the other upon the lower lid in such a manner as to represent the diameter of the eye from above downward. Comparisons are in like manner made here as before.

We now come to the subject of the extraction of the magnetic body. The use of the magnet in surgery of the eye was first recorded about 250 years ago, when Wm. Fabry, a German, removed a small piece of iron from the cornea by means of a lodestone (1656). It is a little over half a century (1842) since Meyer, also a German, removed, through the wound of the sclera, a piece of iron from the vitreous, using a thirty-pound magnet. About a quarter of a century later, McKeown, of Belfast, made the first recorded equatorial incision (1874) for the removal of a piece of iron from the vitreous, which he accomplished by means of a magnetized rod of iron—the so-called permanent magnet. In 1877 Hirschberg perfected his electromagnet, and two years later operated successfully with it on a difficult case, making the first recorded meridional incision.

1. Trans. of Am. Ophthal. Soc., vol. II, p. 708.
2. I am much indebted to Dr. Harold Sneve for aiding me in my efforts to obtain good radiographs.

In 1894 Haab, of Zurich, constructed a giant magnet on the principles of the one used by Meyer in 1842. So many good descriptions of the magnet have been published that I shall here say but little regarding its structure. It consists of a cylinder of soft iron, around which is wound many layers of insulated copper wire. There is a cut-off switch fastened to the wall, also a resistance box at its base, with a number of steps which allow the gradual admission of the current, thus enabling an assistant to regulate the amount of force required by the operator. Meyrowitz has mounted the Haab magnet so that it may easily be moved in practically any direction.

I find that when in the recumbent position, the patient is often under much better control. This applies particularly to those cases in which the amount of traumatism is great.

The Hirschberg magnet consists of a soft bar of iron around which is wound a coil of fine insulated wire. It is a hand magnet provided with a number of variously shaped points of different sizes. It can be connected to a series of dry cells or to a zinc carbon element, and will support as high as 500 grams. It should be used in conjunction with the Haab. What the one will not accomplish, the other, in a large majority of cases, will.

Knowing the position of a foreign body lodged in the interior of the eye, we elect as to whether we shall remove it through the tract of entrance; draw it by means of a large magnet into the anterior chamber and afterward through a corneal section, remove it with the small point of the Hirschberg magnet; or we may decide that a meridional or an equatorial incision is preferable. In each instance it is our aim to remove the iron by such a method that it will result in the least injury to the eye.

The Haab magnet is and has been much used as an important factor in diagnosis. When used for that purpose the head of the patient is brought gradually toward the pole of the magnet. If pain be then present or increased we know that the foreign body has impinged upon the tissues; finally, if after we have turned on the full force of the current, we get no pain nor increase of pain, we reverse the current and apply the magnet to the eye so that its power-lines shall have had effect from all directions, and then if the patient complains of no pain, we infer either that there is no magnetic body present or else that it is too firmly imbedded to be affected by the magnet.

The magnet as a diagnostic instrument should be applied only after all other means have failed to show the presence of iron or steel in the eye. It is of the greatest importance that the patient be seen as soon after the injury as possible.

VARIABILITY OF THE TUBERCLE BACILLUS.

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The variability shown by tubercle bacilli in their staining reactions and morphology has been made the subject of much study for more than a year at Fort Stanton, N. M. Facts have been observed which, so far as we have been able to ascertain, have not as yet been described in the literature of tuberculosis, or at most vaguely alluded to, and which we believe have importance in establishing early and correct diagnosis, as well as in other stages of the disease.

Our purpose now is to demonstrate the important fact that tubercle bacilli from different subjects, and from the same subject at different times, undergo changes in their affinities for certain dyes, to the extent, at times, of rejecting one or several while displaying avidity for others.

This phenomenon has been observed and studied by P. A. Surg. Cobb for several years past, to as great an extent as official duties allowed, but not until detailed at Fort Stanton was it possible for him to give the matter the attention it deserved. Since then the results of our experiments have not only confirmed his earlier tests, but also brought out some new facts hitherto unobserved. In this connection the reader is referred to Cobb's article in the "Annual Report of the Marine-Hospital Service" for 1898.

The text-books all seem to unite in stating that tubercle bacilli are best stained and demonstrated by fuchsin solutions, given solutions properly made up, of course, and sufficient experience and manual skill on the part of the operator in destaining and counterstaining. Now, in view of the fact that there are several preparations in the market designated as fuchsin, as well as modifications of the same substance under the names of magenta, rosanilin, solferino, etc.—all classed under the head of fuchsin—it is evident that the books are not at all clear as to what preparation is referred to as fuchsin. Generally little or no mention is made of the fact that several other dyes than fuchsin are able to stain tubercle bacilli equally well; or if alluded to at all the impression is usually conveyed that they require many hours in time, and the employment of aniline oil as a mordant, which of course renders solutions so unstable as to be worthless in a short time. The different preparations of fuchsin, and the varieties known as magenta and rosanilin possess markedly different physical properties very easily observed, as varying solubility in alcohol, water and other liquids, staining of tubercle bacilli and other micro-organisms, etc. Grubler's fuchsin (S) is quite soluble in water, sparingly so in alcohol, gives no metallic luster in solution, and rarely is able to stain tubercle bacilli. Merck's fuchsin (anilin-red) is the entire reverse of Grubler's, but the latter's preparation of magentaroth seems physically identical with it. Of course, bacteriologists are aware of the different uses of the fuchsin preparations and varieties, but general practitioners are not always so, and often make the error of employing acid fuchsin (fuchsin S) in sputum examinations, which rarely stains tubercle bacilli, being intended for other purposes. This mistake is not to be wondered at, seeing that the instructions in the books are not sufficiently definite on this point. Grubler's Sudan III seems to be a most reliable stain for tubercle bacilli, while Merck's is said to be worthless for that purpose.[1] We have also noticed differences in efficiency in bottles of certain dyes from the same maker, especially so with methylene-blue, gentian-violet, fuchsin and safranin. Up to the present time we have had best results from Grubler's Sudan III, magentaroth, Merck's fuchsin, and Merck's methyl-violet. Malachite-green (Merck's) has worked beautifully in several cases, but our experience with it is only recent. Regarding mordants, we prefer carbolic acid to anilin oil, and use it with all stains except Sudan III, which does not require a mordant. As remarked before, anilin oil makes solutions very unstable, while those containing carbolic acid last much longer, excepting rosanilin which does not seem particularly valuable. To avoid complexity it is best to make all the formulas relatively identical, that is, where their physical properties permit. Thus the solution in which the different dyes are dissolved may consist of 5 per cent. carbolic acid in 25 per cent. alcohol. From 1 to 2 per cent. of any dye may be added and the solution is complete, though saturated solutions would be as good or better, but in the case of very soluble dyes the mixtures would be too expensive. Sudan III is an exceptional stain both in composition and principle, and for staining tubercle bacilli all that is necessary is to use a saturated solution in absolute alcohol. Except in rare instances any of these stains should do its work within two minutes, either hot or cold. Sudan III when dissolved in turpentine will also stain tubercle bacilli. The same destaining fluid, consisting of HNO_3 or HCl, alcohol, or H_2SO_4 25 per cent., or sweet spirits of niter, can be used for all stains except Sudan III, which only requires plain alcohol.

The method employed in this laboratory in preparing the specimen for staining is one known as the Berlin method. Cobb improved this method, and as it is far superior to that in general use it will be described.

A portion of the sputum is removed with a wire hook, not necessarily of platinum, and transferred to a clean slide held between the thumb and index finger of the left hand. A second slide is now taken in the right hand, held in like manner, and pressed down upon the sputum on the first slide, and they are then drawn apart and pressed together alternately until a spread of uniform distribution is effected on the apposed surfaces of both slides, with the exception of a space one-half to three-quarters of an inch from each proximal end where the slides are grasped by the thumbs and fingers. The slides are then dried and fixed in the usual manner, and are ready for staining. When ready for examination, a drop of oil of cedar or glycerin is placed directly on the spread and the oil-immersion lens brought in contact with it. As this method dispenses with cover glasses its advantages are obvious. Cover glasses are objectionable, owing to their small size, brittleness, liability to cut and infect the fingers of the operator, and the general nastiness of the cover glass method. The improved Berlin method prevents error in demonstrating the staining qualities of any stains employed, as both spreads are prepared in the same manner and should contain the same relative number of bacilli. The demonstration of variability is also well shown here when one spread is beautifully stained by one method, and the other spread, when some other stain is used, often gives negative results. Glycerin is to be preferred to oil of cedar for oil-immersion work not intended to be permanent, as slides thus used are much easier to clean. But it should be clearly understood that even with glycerin it is not easy to rid slides of stained tubercle bacilli. It seems incredible that these germs can preserve their form and staining properties as they do in the presence of heat and alkalies, but we have often detected fairly well stained tubercle bacilli on slides boiled one-half hour in solutions of caustic potash. About the most reliable cleaning reagent we have employed is concentrated lye in strong solution, in which the old slides should be boiled at least one hour. Before proceeding with the subject of variability it may be of interest to note that tubercle bacilli can often be stained in absolute alcoholic solutions of several dyes to which pure carbolic acid is added. This is only mentioned because the books

1. Rosenberger, in the Journal of Applied Microscopy, June, 1900.

lead one to believe that the presence of water is essential.

In a small percentage of cases the bacilli are found to possess so little affinity for any stain that even very dilute acid destains them almost instantly, and only by the most delicate manipulation can they be demonstrated. In a few exceptional cases no tubercle bacilli can yet be shown by any method, though the patients present undoubted physical signs and symptoms of tuberculosis. Such cases, however, as well as the preceding ones, usually contain bodies of irregular conformation resembling bacilli and showing some affinity for the primary stains. These bodies may possibly be involution forms of tubercle bacilli. In a few cases experimented with who have lesions other than pulmonary, such as tubercular tonsil and lupus vulgaris, the bacilli seemed to indicate a preference for Grubler's fuchsin (S.) —the poorest stain for sputum. Only a few pulmonary cases here can be made to show tubercle bacilli with Grubler's fuchsin (S.), but these also stain with other colors. A very curious fact noted in several patients immediately upon their arrival was the impossibility of making their bacilli retain any stain by a quick method, though specimens exposed to the stain 18-24 hours were beautifully stained. This condition was not permanent, however, and in the course of a few days the bacilli would stain in the usual way. Differences in size of the individual bacilli are often observed, and as a rule seem to depend on the length of time the disease has been present, the older cases showing bacilli of nearly uniform size and few in number, while recent cases are apt to exhibit considerable variety in this respect, the sputum being loaded with bacilli, some so large as to inspire doubt as to their identity with the Koch bacillus, even though staining similarly and having the same granular structure. The so-called branching form of tubercle bacillus is occasionally met with in acute cases, though its occurrence is comparatively rare and its special significance, if any, is unknown.

In order to explain the fact that tubercle bacilli could not be demonstrated at all times in sputum from any subject, it has been frequently claimed—by observers who apparently employ only one primary stain—that the bacilli in question are absent at such times, and, presumably, only appear in sputum coincident with acute exacerbations in which active tissue destruction is going on. We must take exception to this statement or inference since making use of a variety of staining methods, confidently believing that in no well marked case in which tubercle bacilli have once been demonstrated are they ever absent from the sputum, though often rejecting one or other stain temporarily. This belief receives additional emphasis from the fact that introduction of sputum from such cases supposed to be free from tubercle bacilli into the peritoneal cavities of guinea pigs usually produce the lesions of tuberculosis and subsequent death.

Of course, sputum is more appropriate for demonstration of a large number of tubercle bacilli when raised in the early morning than during the rest of the day, but that fact can be readily explained on purely physical reasons. During the night, if the patient sleeps well, the pulmonary sputum accumulates, and as its water is transformed into vapor and removed with the breath, it becomes quite dense, and naturally contains many more bacilli than at other times.

It is often astounding when, after negative or doubtful results with one stain the specimen is tried with another or several others, and is then seen loaded with typical tubercle bacilli. On one occasion bacilli in the sputum of a certain patient could only be made to retain gentian-violet, but several days later the phenomenon was reversed, methylene-blue being held with avidity, while the former dye was so imperfectly retained that a diagnosis would have been impossible by its agency alone. Many other instances of variability have been encountered, and the importance of such in practical diagnosis must surely be considerable.

For quickly staining tubercle bacilli in tissue sections the following method is convenient: Place the section on the slide, and when the alcohol has evaporated apply a drop of a weak solution of egg albumin and gelatin; dry in air, fix with heat, and stain same as sputum spreads, except that heat should not be applied and staining and destaining ought to have about double the time.

THEORIES OF VARIABILITY.

In view of the natural doubt likely to arise as to the bacilli which exhibit such remarkable variability being genuine tubercle bacilli, it may be well to enumerate the several other species of bacteria which, according to the text-books, possess the power to retain certain anilin dyes in the presence of dilute mineral acid. They are the following: 1. Lepra bacillus. 2. Smegma bacillus. 3. Acid-resisting bacteria in butter. 4. Bacillus of syphilis (Lustgarten). 5. Timothy-hay bacillus.

It is exceedingly improbable that any of these bacilli can be responsible for the peculiar variability toward stains so often noticed in connection with our patients when staining for tubercle bacilli. The bacillus of leprosy is out of the question, of course. The smegma bacillus can also be eliminated from further consideration in the large majority of cases, for obvious reasons. The acid-resisting bacteria found in butter might perhaps be present now and then in the mouth shortly after a meal, but they would not likely occur in large numbers in deep pulmonary sputum, and even if they did, they would shortly appear as colonies on glycerin agar plates inoculated from the sputum. A number of such tests failed to develop bacilli of that character, and examination of oral secretion from several healthy persons did not reveal bacilli capable of holding anilin dyes in presence of acid.

Lustgarten's bacillus of syphilis has always occupied a precarious position, which has become more so since the recent work of Van Niesen has been described. The discovery of the smegma bacillus nearly proved its death blow, but it managed to partially outlive that event, probably because of Lustgarten's claim that his bacillus had also been obtained from the central portions of gummata. Providing it is really an independent organism, it is probable it would stain as the tubercle bacillus usually does, and possibly this germ does figure to some extent in tubercle cases where the syphilitic infection is comparatively recent, but as at present there is no differential test, and as syphilitic consumptives are decidedly in the minority any way, Lustgarten's bacillus can not be considered a very formidable antagonist to the tubercle bacillus when it comes to a demonstration of acid-resisting germs in sputum from a patient having physical signs of tuberculosis.

Regarding the timothy-hay bacillus nothing definite can as yet be said, but considering its habitat, and as a result its association with stables, corrals, etc., its relation and possible identity with the acid-resisting germs in butter becomes a matter of interesting speculation.

The alleged saprophytic form of tubercle bacillus described by Ferran should be briefly mentioned. He asserts that spermin is produced in the cultures, but as we have not yet been able to obtain his full report as to the staining properties and pathogenesis of this variety, nothing further can be said about it here.

Scratches on the surfaces of slides will frequently confuse and mislead a beginner, and their frequent occurrence on slides that have been used several times should always be remembered. They hold the primary stains in presence of dilute acid and after moderate boiling, and often closely resemble bacilli, but generally they can be recognized without difficulty if the following points are borne in mind:

1. Several usually occur in series, resembling minute arcs of a circle.
2. All members of the series have about the same degree of curvature.
3. Their extremities are generally pointed.
4. A granular appearance is not usual.
5. They stain deeper than tubercle bacilli, and have greater power of refraction.

The subject of scratches on the surfaces of glass slides is mentioned here because of the fact that errors in diagnosis are known to have been made from this source.

THE PHYSICS OF VARIABILITY.

It can be taken for granted, in view of Koch's and Klebs' experiments, that the only reason tubercle bacilli are able to resist the destaining action of acids is because of the large amount of fat they contain—about 22 per cent. Possibly and very probably the physical condition directly responsible for the apparent absence or great scarcity of tubercle bacilli in the few cases where we were not able to make satisfactory demonstrations while undoubted physical signs of the disease were present is a relatively small percentage of fat in the individual bacillus. Klebs asserts that when tubercle bacilli are exposed to the action of strong alkalies for some time they lose their power of retaining stains against acids, and thereafter act like most ordinary bacilli toward stains and destains. While the fat hypothesis may hold good for the cases just mentioned, it cannot explain the variable affinity of genuine tubercle bacilli for different anilin dyes whose principle of action is apparently the same. In these cases it would seem that some essential modification in the fat or stroma or capsule is brought about, varying in nature and extent, so that at one time a certain stain or set of stains has a greater chemical affinity for the modified bacterial substance than at another. We have often noted that a specimen in which no typical bacilli could be demonstrated nevertheless contained granular bodies which held the primary stain. Klebs states that these are disintegrated tubercle bacilli. We were usually able to demonstrate typical bacilli in such cases at a later period. Sputum is, as a rule, strongly alkaline, and that fact may have some importance in the cases recently alluded to where the bacilli can only be found with difficulty or not at all, the hypothesis of saponification to a greater or lesser extent being then tenable. But the amount of alkalinity alone could not explain, for instance, why gentian-violet is preferred to methylene-blue at times, or the reverse. The peculiar sweetish taste so common in the sputum of tubercle subjects may perhaps indicate the presence of one or more substances having special mordant or destaining properties for certain stains. So far as we are aware, previous chemical experiments to isolate this sweet substance, or substances, have resulted negatively. Tuberculous sputum does not give the Ehrlich diazo-reaction, fresh or boiled, acid or alkaline, only showing a deep yellow ring when the ammonia is added, and not the intense red one frequently seen in the urine. In our experience this reaction is most marked in the urine of cases where the disease is actively progressing and constitutional symptoms are quite severe. The output of urea is increased in this altitude.

Whatever the chemistry involved, it is probable that the phenomenon of variability is ultimately the result of one of two factors, or a combination of both, namely: 1. The production of a specific antitoxin. 2. The presence of extensive mixed infection.

That a specific antitoxin is produced in tuberculosis as in other infectious diseases there can be no reasonable doubt, and that being admitted, it seems certain its presence must affect the vitality of the bacilli more or less. The changes thus brought about may have for their visible manifestation the capricious staining reactions so much discussed here; in which case the variations exhibited would indicate the different stages of vitality possessed by the bacilli, some stains having affinity for strong organisms and others for debilitated ones. Speculation along these lines naturally brings in the subject of immunity at the same time, and certain aspects of it are nowhere better exemplified than in the clinical observation of a number of tuberculous patients. Take, for instance, individual or relative power of resistence to the action of toxins produced by tubercle bacilli. Some patients, presenting physical signs of extensive tissue destruction in both lungs, will live on for a long time without becoming markedly worse. The turning point on the downward arc is passed, and then, slowly but surely, progress towards recovery is made. In those of this class who do not recover the necropsies frequently reveal the fact that death was more the result of gradual suppression of functional activity than of intoxication. On the other hand, some patients, having a comparatively small amount of tissue involved, will show a marked susceptibility to the toxic action resulting, rapidly growing worse in every way and shortly succumbing to the disease. The necropsies usually confirm the physical findings in life, showing that only a small portion of pulmonary tissue was functionally inactive, and consequently that death was the result of intoxication and not loss of function. Of course, in such cases, mixed infection probably plays a more important role than generally given credit for.

The relation of mixed infection to the variable staining properties of tubercle bacilli and to the clinical phases of the disease is, we have reason to believe, a subject worth much time and study, though somewhat neglected since the first rush of cultivation experiments following Koch's memorable discovery. We have recently given some attention to it in a superficial way. But the whole subject ought to be gone over again thoroughly. Streptococci are usually spoken of as being of most importance in mixed infection, though in our experience staphylococci are much more in evidence. However that may be, the fact remains that in the matter of vitality streptococci have the advantage, our cultivation tests having demonstrated their ability to survive exposure to carbolic acid 5 per cent., and bichlorid of mercury 1 : 1000, about as long as tubercle bacilli. The idea may be reasonably entertained that the chemical product of other organisms, present in large numbers in tubercle sputum, may be, in part, at least, the cause of the staining variations shown by tubercle bacilli. Ina-

bility to stain readily, or erratic manifestations in that direction, probably indicate lowered vitality of the bacilli. There are a number of facts which show that some microorganisms (the products of their vital action) are inimical to the growth and life of others. It will be interesting to note the effects produced on tubercle bacilli—from the staining point of view—when other germs are grown along with them; also the action of blood serum of appropriate animals immunized to tuberculin and the far more powerful toxins recently extracted from tubercle bacilli.

In this connection the clinical relation of other diseases to tuberculosis, when coincident with it, should receive brief mention. There is evidence showing that in several tubercle cases attacks of smallpox apparently eliminated the former disease. The clinical observations of Portucalis on the relation of syphilis to tuberculosis are interesting, and his conclusions will be quoted verbatim:

"(1) Syphilis, when it is contracted by a phthisical patient, arrests the course of the earlier disease. (2) When contracted by a patient already suffering from phthisis, syphilis runs a mild course. (3) The antagonism between the microbes of these two diseases produces a neutralization of their toxins. (4) When the microbe of syphilis has been discovered, and its cultivation made possible, we shall be able to prepare a serum with which consumptives may be inoculated and their disease arrested. (5) Inoculation with the blood serum of syphilitics in the third stage would be of great advantage to consumptives."—*Med. Rec.*, Sept. 8, 1900.

From the results as noted in the foregoing it seems logical to advance the following

CONCLUSIONS.

1. Tubercle bacilli are not always so easy to demonstrate as is commonly believed, even though present in large numbers.

2. The fuchsin solutions, like those of other dyes, can not at all times be absolutely depended upon.

3. Tubercle bacilli from different patients, and from the same patient at different times, will not invariably stain by one method.

4. The bacilli exhibiting these varying staining properties are genuine tubercle bacilli, and not other species of acid-resisting germs.

5. The staining variations probably depend on physical and chemical changes in the bacterial substance, instituted either by antitoxic action or by the products of associated organisms, or by a combination of both.

6. In the absence of demonstrable tubercle bacilli, where physical signs of tuberculosis exist, a prompt diagnosis of that disease should be confidently made in the interest of the patient, and no valuable time be lost in waiting for typical bacilli to appear.

MEDICAL COLLEGES AND PROFESSIONAL STANDARDS.

INEZ C. PHILBRICK, A.M., M.D.
LINCOLN, NEB.

According to the report of the United States Commissioner of Education, in 1899, there were in that year 23,778 medical students and 4911 medical graduates. Between 1875 and 1899 the increase in the number of medical students was 177 per cent. But not alone upon statistics do we depend for confirmation of the crowded state of the profession. The fact is so patent and alive that much of the editorial space of leading medical journals is devoted to a discussion of the condition, its cause and its cure.

That a majority of the profession is incompetent and unworthy, is not subject to statistical proof. To the unprejudiced medical observer of the profession of almost any locality, the truth is patent that very many of its members are persons of inferior ability, questionable character and coarse and common fiber. The little esteem in which the profession is held by laity and government attests its unworthiness. Patients whose number is legion throw themselves from its arms into the embrace of quackery, and we must admit that the support is often as effective in the one case as in the other. "Christian Science," mental healing, magnetic healing, and osteopathy reap a rich harvest from the incompetency of regular practitioners. Granted that the wisest and most conscientious often stumble, to any one possessed of medical skill witnessing the mistaken diagnoses, inefficient and ofttimes barbarous, treatment, and the unconscionable fleecing of a credulous public by members of the profession, is borne in the conviction that, like the traveler on the Jericho road, he has fallen among thieves. The public can not discriminate. In its view there is no comparison of a degree which, qualitatively considered, varies as between mud and mind. The influence of the profession is not felt in the conduct of government. Bills championed by its foremost members are pigeon-holed in the committee room. Just bills for compensation for medical services rendered to the public are not allowed; while those licensing quackery make triumphant passage from the first reading to the governor's signature. The opinion upon matters medical of the ignorant member from X. outweighs that of the highest in the profession. Why? Because the profession does not conform to that short rule of Dr. Holmes' for acquiring the confidence and esteem of the public—to deserve it. Unquestionably the cause of professional degeneracy lies in the educational requirements made for entrance to the profession; and hence the question resolves itself into one of medical colleges, their number, their location and their standards. The educational aspect of medicine is seldom discussed in our societies. Are we dwellers in houses of glass and hence wary of stone-throwing? In defense of the highest, it is well if all our houses of glass be shattered that we must build more enduring.

Medical colleges exist far in excess of any public need. Like the country store which doles out its inferior wares at every cross-roads, a so-called medical college is found in almost every town of generous size; and to obtain a medical degree is within the possibility, intellectual and financial, of any youth, however lacking in mental and moral fitness. In inverse ratio to the frequency of medical colleges do we find the extent of their equipment. In the majority of cases they possess few facilities for demonstration; are located in towns where there is not a sufficient number of dependents to furnish requisite clinical material; and generally have as instructors men of mediocre or less ability. The same law that holds in trade, to-wit, that the best interests of the consumer are served by bringing him as near as possible to the center of distribution, obtains as regards medical instruction. The report of the United States Commissioner of Education for 1899 notes 151 medical colleges. the recent estimate of the Secretary of the AMERICAN MEDICAL ASSOCIATION is 173. No doubt the latter figure is more nearly correct. As an institution of local ill-fame and more than average depravity is not noted in the list it is probable that other choice institutions throughout the land do not appear in this report. The total number of medical colleges in Austria and Germany, with a population greater than in the United

States, was in 1898, twenty-nine. In the same year, Great Britain with a population more than half ours, had seventeen. The editor of the *Medical Record,* commenting upon the discrepancy, while admitting the greater need of America by virtue of its less dense population, adds: "But we do contend that when a city the size of St. Louis has as many medical schools as Russia, the craze for multiplying these schools is being carried to absurd and harmful lengths." As regards the establishment of medical schools there seems to be but one governing idea, that they may have life, considered in a purely quantitative sense, and have it more abundantly. Instead of bending its energies to the eradication of the large number of medical schools which are a blot upon its escutcheon, the profession establishes ever more, perhaps reasoning homeopathically that one poison will antidote another. A motto which might appropriately adorn the portals of many of our medical colleges, were fitly expressed in the lines of the old doggerel: "Will you walk into my parlor, said the spider to the fly?" Being generally a very inexperienced fly, fresh from sylvan groves, he often accepts the invitation, and can never thereafter extricate his feet from the mesh of inadequate instruction and indifferent example found therein. Professional welfare is not a desideratum in the founding of most medical colleges, they being merely reflectors of personal ambition. To most men the good of the moment is paramount. Few there are who, tempted upon the mountain of personal ambition, offered a professor's title or an enlarged fame and clientele, can, following the Nazarene, exorcise Satan.

Excessive multiplication of medical colleges entails inferior instruction and example. Prophets are not as thick as roses in June, and to be divinely called to the instruction of youth is a distinction to which few attain. Too often men who have not sufficient interest in their profession to attend the meetings of a medical society, who, if they possessed the energy, have not the ability to write a correct medical paper, much less appreciate one, and whose morals are for the most part in that nebulous stage where the distinctions of *my* case and *thy* case, are but dimly revealed, are, forsooth, set apart as instructors and inspirers of youth.

Commensurate with the vast strides that medicine is making along the lines of bacteriology and physiologic chemistry, laboratories are demanded, requiring for their equipment large sums of money, generally not available to the small institution. However, given the endowment the latter can build and equip the laboratory and call men of ability to professors' chairs. You can make a bacteriologist in a laboratory; you can not make a physician. To make a physician demands a large clinical experience, legitimately obtainable only where there is a large dependent population, and hence only in metropolitan centers. To acquire a knowledge of pathology demands a rich autopsical service, possible only in connection with large charity hospitals. While to maintain clinics sufficient for the instruction of medical classes were in Chicago feasible and defensible, in the town of 50,000 it would well-nigh pauperize the entire population. So irrationally have medical schools been established in our large cities that it is recognized by sociologists and charity workers as one of the most potent causes at work to undermine the sense of economic independence and self-respect in the community. The clinics must be filled; hence, the ability to pay of those seeking relief can not be questioned. The official of the railroad and the banker's wife seek unquestioned the free medical services offered therein. Not alone are the laity pauperized; the young practitioner walks long and wearily in the borderland between inanition and starvation. My statements are fact, not fancy.

It is granted that there are men in the small towns and the country—that brooder of self-reliant strength—possessed of sufficient ability and character to honor a professor's chair; but this does not justify the founding of the medical college in their midst. Let him who deems his light hid under a bushel remove to the medical center, where, if he possess transcendant ability, that recognition it merits will be vouchsafed.

While we Americans are proud of our state universities, which bring within the possibility of well nigh every young person the higher education, we must admit that they are liable to severe criticism. A chief indictment is their incorporation of the medical department. In no case does a state school take first rank among medical colleges; and with little exception to eliminate the medical department from the state university should be our constant aim. Besides the objections already named, applying to state schools because of their usual location in small towns, their students lack the inspiration arising out of association with a large working profession and access to large medical libraries. Boards of Regents need education along this line. That a majority of our 173 medical colleges require a four years' course is no adequate basis for judgment as to their worth. It has been said: Better fifty years of Europe than a cycle of Cathay." A safe criterion is the old injunction: "By their fruits ye shall know them." Teeth set on edge by sampling the product sent into many a hamlet is sufficient evidence that either the persimmon was prematurely plucked or intrinsically beyond the embrowning and sweetening influence of sun and frost.

But not alone do we find explanation of the excess of medical colleges in the commercial spirit of the time. There is an ultra-democratic tendency abroad—somewhat in disrepute at present in governmental circles—which maintains that nothing is too good for anybody, ignoring the fact that there is an aristocracy of intellect and character not dependent upon birth, to which, if our civilization is to grow and endure, we must entrust guidance. If this be a trust, let us have it.

While recognizing the great ability and disinterestedness of members of faculties, and the worthy equipment of graduates of our two Nebraska medical schools, I affirm that for Nebraska to maintain one medical school, much more two, is in contravention of the fundamental law of professional progress. Until the profession can be brought to this way of thinking, until, in the words of Emerson, "Private men can be brought to act with vast views," we can not look for amelioration of professional conditions.

In closing, let me not be misunderstood. I would not ignore the many noblemen in character and intellectual grasp, who have not behind them the momentum of birth or general culture, or best or even good medical training, but who have by innate ability, untiring devotion and unimpeachable honesty, won highest professional honors. To such no added restrictions to entrance to the profession would oppose ultimate success. Such are not the supporters of the diploma mill.

"Hope springs eternal in the human breast," and that such is the case justifies the belief that there is ever a basis for hope. Along with our commercialism, our intense individualism, there is growing a reactionary collectivism, proclaiming the solidarity of the race,

that the good of one is the good of all, upholding the law of individual sacrifice as the only saving grace. Ultimately, he that exalteth himself shall be abased, is the case of the physician in the abasement of a prostituted profession. The cosmic law of Huxley, tersely if inelegantly state as, "Every man for himself and devil take the hindmost" has yielded, in theory if not in practice, to the ethical, where personal sacrifice rules.

In the service of a regenerated profession, let us conform to this law. Let us not for personal ambition commit the unpardonable sin, medically considered, of further lowering educational standards, by foisting more medical colleges upon an already basely deluded public. Let us labor unceasingly to raise professional standards by upholding the thorough preliminary education (a college course, and that not obtained from the sectarian academy of the cross-roads); medical reciprocity obtained by national regulation of medical schools and rules governing admission to practice, and the best professional training.

Let fewer and better be our motto. Let us discourage the entrance of the unfit into a profession to guard whose honor should be our every thought. What I have said I enter as a protest against evils which are not chimerical, and which can not be met after the manner of that accorded to the prejudice in the rhyme, by assuming an absent-minded air and walking directly through them as if they were not there. They stand a solid and impenetrable hulk athwart the path of professional progress, requiring for removal the lever of an intelligent and disinterested attitude on the part of the members of the medical profession.

PHILIPPINE CUSTOMS AND HABITS.

J. C. MINOR, M.D.
MAJOR AND SURGEON, U. S. VOLS.
MANILA, P. I.

In the next decade there will be as great changes in the Filipino medical world as there will, doubtless, be in the civil government of these possessions. A record of a few of the things that are, may for comparison in some time to come be pleasant to remember, if not interesting now. There are many customs among these people that have a naturalness about them that is refreshing, others that are deplorable, and others yet that so squint both ways that it is a pertinent question to ask: Who knows which is right?

To the eye that sees in nature God's best gift—health, nothing can be more pleasing than the customary dress of the women of the Philippines. From the artists' standpoint beautiful; from that of the sociologist unchangeable; and from the standpoint of the sanitarian healthful and therefore faultless. No modiste of society's chameleon-like world has fashioned for woman a gown more pleasing than the *sarong* of the Moro, or the comfortably draped *harmartin* of the Igarrote or Negrito. It is true, one often feels a disgust for the apparent filthy garb among the lower classes of women while they work; but on a feast-day or a Sunday, one has to wonder at these same creatures as they appear with fan, cigarette and sunshade in their gowns of *jusi* and *pinya* to whisper devotion to the Virgin, or whirl in the waltz at a *baile*. One wonders at the hazardous manner in which the drapery clings to the wearer. But for centuries the style has remained unchanged and these garments have faithfully adhered to each generation, namely, a *pannela* (or neckerchief); large loose sleeves; a loosely draped bodice or *camisa;* a gingham, calico, hemp, or silk brocade (according to purse) skirt; toe slippers—no corns, no corset and no tight bands—veritable walking advertisements for the late lamented Mrs. Pinkham's shibboleth "yours for health." Childbirth among them is what I believe God intended it, a physiologic process and not a disease, nor a disgrace. The occasion rarely demands the surgeon's aid, a female friend officiating more as a companion for the woman and nurse for the infant than for professional services. The infant receives all attention. The attention consists of annointing with cocoanut oil, severing the cord and applying a clean cloth belly-band. The new-comer is then wrapped in a towel, or among the better element attired in a little slip of some dainty fabric and laid aside for inspection by the friends who have gathered to welcome it to its new world, which in the absence of flannel possibly is already growing more or less chilly to the little adventurer.

Gathering at the River.

The National Bath, open at all hours.

Labor rarely consumes more than four hours. Death of a mother in child-birth is infrequent, nor are puerperal sequelæ more frequent. As a rule these hardy women are up and at work in a day or two; often they are not confined to bed at all and are in attendance the third day at the Christening *baile* (ball or dance). Abortion and miscarriage are seldom or never encountered; if either does occur it is from accident and never induced. Still-born babies are common.

The people as a class seem to know little or nothing of what to do for *the helpless,* whether it be to assist an infant in its advent to the world or minister to the wants of an adult sick enough to go to bed. They usually sit around and do nothing until Providence or Death relieves the sufferer.

The corset, until the past year, in many towns has never been worn. Now, many of the upper-ten Filipino

The Costume del Pais. The Water Carrier, with Bamboo Bucket.

women imitate the *senorita Americana* by donning on feast days, etc., this agent of the devil and gynecologists. Just how soon the civilizing influence will suggest to the Filipino mother the "inconvenience" of bearing children remains to be seen. Now, to be a mother seems

Smoking at the Baile.

to be their dream of happiness. Matrimony is held in high esteem by all the natives I have lived among. Rape and illicit intercourse are seldom heard of. A woman's highest ambition seems centered in maternity. Her fondness for the first child is only exceeded by her expectations for the future. The facility with which labor is accomplished doubtless encourages the industry, and so "pickaninnies" (as they are commonly called here) are as plentiful as blackberries.

The fact is noticeable that these people are modest; and although they have no hesitancy in going more than half naked about their vocations and even obeying calls of nature by simply stepping a pace or two aside, they deem it shameful and unpardonable to make an indecent exposure of himself or herself to the opposite sex either in public or in private. In my practice among them I have found it difficult to obtain an ocular examination of the genitals of the few men I have encountered with venereal diseases; and so far have been unable to make either a specular or digital examination of a native woman.

Their unceremonious manner of stepping aside to relieve the bladder, any time or anywhere, possibly accounts in a great measure for the infrequency of vesical irritation, cystitis, enlarged prostate and other

Smoking at Work.

diseases dependent in origin on prolonged retention of urine and dilation of the bladder.

SANITATION.

Sanitation in the native hamlets of the Philippines is as simple as it is primitive. There is no systematic manner observed in the disposal of sewage and wastes. The well-to-do class have a bath room and closet, usually in the kitchen, always near the kitchen. The bathing facilities in the aggregate for the well-to-do consist of a large, cumbersome and homely tub or stone tank with half a dozen servants to fetch water. The closet is generally a stone flume opening flush with the floor (an armed chair decorated like a throne sitting over the opening) and emptying either into a well for the purpose, or having a side opening at the ground below with a trap door through which the deposited matter is removed or not according to the memory of the *major domo;* the olfactories of the household being so obtunded by tobacco smoking that they rarely sug-

gest to the owner of the house or its functionaries the propriety of an inspection. The poorer classes have probably the more efficient method of disposal of wastes, certainly the most convenient and labor-saving. Every native owns a hog; the native "presses the button." Sometimes an uneducated hog has to be tethered underneath the kitchen corner till he learns his business. The poorer class bathes in public by getting under a spout in the rain or by douching with bucketful after bucketful from the well. They never expose their persons in these ablutions. The pickaninnies bathe without a rag on, anywhere and everywhere.

They are opposed to putting offal in heaps or holes, but whether by reason or instinct or habit (I know not which) they scatter all rubbish to the four winds, or dump it into the most convenient water course. At Zamboango (Mindinao) as also at Romblon and other places a sluggish but large mountain stream is artistically led and decorated with sod, flowers and bridges throughout the corporate space, and supplies the native contingent with baths, water for drinking and laundry purposes; all three acts were formerly played indis-

Smoking at Home.

criminately at every and all points along the narrow space of this overworked stream. Strange to say the population of the two towns mentioned (I am credibly informed) has never been affected with epidemic disorders. It is difficult to account for this immunity unless it is because those who survive the atrocious ignorance displayed by parents in rearing them to the age of 10 years, must be invulnerable thereafter.

Though their method of scattering wastes to be dried and evaporated and carried off by the winds appears to have some virtue, such a method must be an important factor in producing the prevailing diseases in the towns, viz., skin affections, tuberculosis, etc., since they all are afflicted with the habit of drying the newly-washed laundry by spreading it out on the nearest stretch of ground. I have seen in some of the laundrying neighborhoods the streets (there are no pavements) so covered by drying garments that one could walk past only by picking one's way and stepping over and jumping the various articles. They never boil their laundry; wood is too scarce. They are most of the time washing clothes and (it seems) the time not spent in this high calling they put in washing themselves, smoking, dressing and attending fiestas and funerals.

Smoking is just as constant a quantity with a Filipino as "x" is with an algebraic equation. It does not seem to matter a particle whether the proposition be a female symposium of washerwomen "gathering at the river" or a galaxy of beauty and white-duck at a church festival or a ball, one will find "x" = constant quantity = tobacco, either in form of a cigarette or a cigar as big as a marlin-pin. It is smoked by old and young, male and female. Sometimes for a change they chew *buyo*. This is to the native of the orient what "navy" and "climax" is to the American. It is the betol-nut, or the nut of the *bongao* tree wrapped in the leaf of the *buyo tree*. The nut is about the size and formation of the nutmeg and they cut it into four pieces. Each piece with a pinch of lime is daintily wrapped in the green *buyo* leaf and sold to consumers for an eighth of a cent. They keep it in the mouth like a quid of tobacco. The ostensible effect is that of giving to the teeth an indian-red color. The subjective effect is said to be sedative and pleasing after eating. They chew it while at work also, and the beginner expectorates a deal more than is consistent with decency. The constant use of *buyo* seems to have a deleterious effect on the teeth; and both directly and indirectly it impairs the digestive function.

In many towns the natives have come to believe that Americans are strong and large of frame because they do not use tobacco in childhood as do their own pickaninnies. They do not seem to know that a Volunteer has to be strong and large in order to become one, so in many towns the council has forbidden the use of tobacco by children under 16 years.

A statistical report on the mortality of children in this country would be of interest, the mortality under the age of 10 being high everywhere and in some localities as high as 90 per cent.

MEDICAL DEPARTMENTS IN PUBLIC LIBRARIES.

C. D. SPIVAK, M.D.

President Colorado Medical Library Association; Editor Medical Libraries.

DENVER, COLO.

In the world of industry we witness a tendency toward co-operation, unification and centralization. The one line store passes out of existence and its place is taken by the department store. The same tendency is prevailing in the educational world. The medical school proper is slowly disappearing and in its stead comes the medical department of the university. The libraries in large cities like New York, Chicago, Boston and elsewhere are becoming in one way or another merely departments of one great library system. The state libraries of several states have discarded the idea that its books are intended only for the delectation of the state solons—a law library pure and simple. These progressive libraries collect, preserve and make available for the citizens of the state books on agriculture in its various subdivisions, mining, engineering, natural philosophy, etc. Medical departments in public libraries were but few until 1898,[1] when there were only 43 medical departments in the United States, including departments in university libraries that are not supported by the state. Since 1898, however, the movement for the establishment of medical departments in public libraries spread rapidly, thanks to the passage

1. Spivak: Medical Libraries in the United States; Phila. Med. Jour., 1898, vol. ii, p. 851.

of resolutions by two powerful organizations favoring such departments, namely, the AMERICAN MEDICAL ASSOCIATION and American Library Association.

At the meeting of the AMERICAN MEDICAL ASSOCIATION, held at Denver, in 1898, the following resolution was adopted:

RESOLVED: That the AMERICAN MEDICAL ASSOCIATION unanimously approves of any ethical and legitimate methods of encouraging the organization, perfection and support of public medical libraries in all cities, towns and villages of the United States, and urgently urges upon the members of the ASSOCIATION to aid in the formation and organization of such libraries.

This resolution stands unique in the annals of medical history. For the first time has the subject of medical libraries been brought up for discussion before such an august body.

One month after the Denver meeting of the ASSOCIATION, the men who hold the keys to all the libraries of the United States met at Lakewood, N. J., and passed the following resolution:[2]

Whereas, the public library should be the means of stimulating all neighborhood, intellectual and scientific progress, and of representing the combined helpful forces ethical mental and sanitary, furthering the well-being of the entire community, it is therefore

RESOLVED, That in the opinion of the American Library Association it is both possible and advisable in the interests of the library, the profession and the community that public libraries should have medical departments and that physicians and medical societies be cordially invited to co-operate with the librarians and trustees of public libraries in establishing and maintaining such medical departments.

Three years have passed since these two resolutions were adopted, and now a voice is raised in protest against "spending the money of the people for books benefiting only one class."[3] The author, Dr. G. E. Wire, introduces himself to the readers as a graduate in medicine and also of a library school, and therefore is presumed to know whereof he writes. He is not satisfied with theoretic considerations alone, but he hurls an accusation against the physicians in stigmatizing the movement for establishing medical departments in public libraries as having grown out of the "ambition of a comparatively few men to make the people pay for books by which they may enrich themselves." He is especially bitter against the 2000 physicians of Chicago, from whom, in his five years of work in the Newberry Library, he could not "gain one iota of wisdom relative to the selection of books or periodicals." What personal grudge Dr. Wire has aganist the physicians in general and the Chicago profession in particular I know not, but it sounds incredible that 2000 men who constantly read medical books and periodicals could not impart to Dr. Wire one iota of wisdom concerning the things they are most familiar with. Is not there, perchance, something wrong with the receptive faculties of Dr. Wire? But admitting, for the sake of argument, that the physicians could not help Dr. Wire in selecting books, this argument does in no way militate against medical departments in public libraries. It is not the duty of the physicians to select books; it is the business of the librarian. Dr. Wire says, however, when he left the Newberry Library, the library contained 25,000 volumes, and 400 current medical periodicals were received. Dr. Wire, then, has evidently done his duty, whether with or without the aid of physicians. Since he left (1895), the library doubled the number of its volumes, and is now considered one of the best medical libraries in the United States. We know, also, that in the medical libraries of Philadelphia, New York, Boston, Brooklyn, Cincinnati, Denver, etc., the books are selected by committees composed entirely of physicians, and Dr. Wire knows that these libraries will stand comparison with any special library in the world.

The only argument of sociologic import which Dr. Wire brings forward is that a public library should spend the money of the people for books benefiting the "public" at large and not a particular class of readers. Now the question is, who is the "public"? What does the public read? If we should take as a criterion the nature of the majority of books read in the public libraries, then 95 per cent. of the reading of the "public" consists of novels, the bane of every librarian of the land. Yet there is no library whose stock consists of 95 per cent. of novels. Ought the public libraries exclude books on agriculture because this would be catering to farmers, books on chemistry because they supply the wants of chemists? Are not the few, the 5 per cent. readers of "solid literature," who read books on psychology, biology, bacteriology, pathology, sanitation, physiologic chemistry, etc., the real "public," for whose sake books are written, published and preserved. Without these few readers, the public libraries might as well shut up shop or limit their activity to dispensing cheap novels. We have quite a different conception of the function of a public library, namely, that it should be the repository of the world's literature, in the widest sense of the word, and that it should endeavor to supply the varied wants of all its patrons.

After Dr. Wire has exhausted all his arguments, he says in conclusion: "Why do they (physicians) not have their own libraries, supported by themselves as do the lawyers in every considerable city? You do not find lawyers clamoring for law departments in public libraries, and why should the physician be so favored at the public expense?" Dr. Wire, who is a frequent contributor to library literature, and is at present a law librarian, ought to know something about the law libraries in the United States. It seems, however, that even lawyers could not add to his wisdom. Now let us be reasonable and look into the statistics of the subject. According to the statistics of libraries in the United States, published in 1897 by the U. S. Bureau of Education,[4] there are about 100 libraries each devoted exclusively to medicine and law. Out of the medical libraries only about ten are medical departments supported by the state or government, whereas every state or territorial library is *eo ipso* a law library, and therefore the number of supported law libraries amount to more than sixty. That is the reason the lawyers do not clamor for law departments. The lawyers have all they want without asking for it.

We are sure the librarians and physicians of the United States, who have inaugurated the movement for establishing medical departments in public libraries, will continue their good work, and we hope a time will come that whenever the people's money is spent for books, a part of this will go for the purchase of books of that branch of the useful arts which deals with the questions of how to cure, prevent and eventually exterminate disease.

2. Library Journal, vol. xxiii, p. 293.

3. Medical Departments in Rate Supported Public Libraries. Public Libraries, May, 1901, p. 267.

4. Statistics of Libraries and Library Legislation in the United States. Washington, 1897.

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TRICHINOSIS AND TRICHINA INSPECTION

In his recent address before the Philadelphia Pathological Society Charles Wardell Stiles, of the Bureau of Animal Industry at Washington, discussed in a very interesting manner the relations of trichinosis to public hygiene.[1] He calls to mind that about half a century ago the late Joseph Leidy of Philadelphia, in a slice of cold ham which he had cut for the purpose of making a sandwich, made a discovery that was fraught with importance to medicine, to hygiene, to national economics, and to our diplomatic relations. Leidy's scientific curiosity got the better of his appetite, and he demonstrated that the little specks which attracted his attention were due to a small worm, *trichinella spiralis*. Already described by Owens in 1835, Herbst shows by experiments that the worm could be transmitted through food, and Zenker in 1860 established definitely its relations to a form of disease which previously had been confounded with typhoid fever. Eventually the discovery in which the ham sandwich figures so conspicuously gave rise to a special occupation giving employment to 40,000 to 50,000 persons; it resulted in the prohibition of American pork into Germany for a period of nine years, caused a bitter political fight in Germany and the farmers and exporters in this country a financial loss of millions of dollars; it saved hundreds of human beings from disease and death, inaugurated the most elaborate system of public hygiene ever put into practice and gave a mighty impulse to the study of etiology of disease.

Stiles discusses ably the powerful influence which the discovery of trichinosis has exercised upon public hygiene and public policy and then turns to the question of the effect which American pork has actually had upon the health of Germany. He above all others is most competent to speak with authority upon this point, because he has investigated the question thoroughly, having been delegated by the authorities at Washington to go to Germany for that particular purpose. It is pointed out that there are two methods available for preventing trichinosis, a disease which once established is beyond medical treatment, namely, microscopic inspection of the pork before it is sold, and education of the people to avoid eating pork before it is thoroughly cooked or cured, to do away with offal feeding of hogs, and to regulate the country slaughter house. In Germany there is a widespread custom of eating raw pork, and the German microscopic inspection—for which purpose 27,602 persons were employed in 1896—is certainly calculated to foster the custom of consuming raw pork because it gives rise to a feeling of false security among the people. During the exclusion of American pork from Germany (1883-1891) there was reported from that country an annual average of 454 7/9 cases of trichinosis, with 30 4/9 deaths. Since the readmission of American pork (1892-1898) the annual average has been 149 cases, 3 6/7 deaths, so that it can not possibly be maintained that American pork has caused any increase in trichinosis in Germany. In fact, Styles shows conclusively by a summary of German statistics based on German evidence that the sanitary quality of American pork exported to Germany is fully vindicated. Indeed, he goes so far as to intimate that the total prohibition of German pork in Germany and the compulsory use of American pork "would probably do more to eradicate trichinosis than does their elaborate and expensive microscopic examination." Not a single case of trichinosis has been traced to the more than 200,000,000 pounds of pork exported from this country to Germany during 1892-1898. No one has claimed a reward of 1000 marks offered since two years by American importers to the first person who can "prove a case of trichinosis in man in Germany due to American cured meats or sausages imported under the American certificate since 1891." The important lesson in public hygiene from the figures and arguments presented by Stiles is that the present curing methods employed in this country are superior to a general compulsory system of trichinia inspection.

That the custom of eating raw pork obtains at least to some extent among Germans in this country is probably indicated by the fact that of 274 American cases collected by Stiles, in which the nationality was ascertained, 76 per cent. were Germans.

1. Proceedings Path. Soc. of Philadelphia, 1901, iv, 137-153; THE JOURNAL A. M. A., xxxvi, 1577.

THE RELATIONS BETWEEN ALCOHOLIC INDULGENCE AND VENEREAL DISEASE.

Of all the infectious diseases there is none so easily and so surely avoidable on the part of the individual as the venereal diseases. It becomes therefore a most important matter to inquire into the influences that lead up to exposure and favor infection and to aim at their removal as far as possible. Now, alcohol gives rise to certain physiologic effects that may result either in simple functional disturbances or in actual structural or organic disease. While alcohol is primarily a stimulant, it becomes, when taken in large amounts or for long periods, a depressant, lowering inhibitory activity, especially as exhibited in the psychic sphere. It is in this way that it leads to sexual abuse and that it acts as a predisposing cause of the venereal diseases. Of this relation practical experience affords abundant evidence, a statistical presentation of which has been undertaken by the distinguished psychiatrist Dr. Aug.

Forel,[1] who dwells upon the frequency with which alcoholic indulgence on the part of young men, and even of young women, leads to illicit sexual intercourse, with its obvious attendant dangers, while he points out upon the other hand that a large proportion of prostitutes are the offspring of alcoholic parents. In both sexes alcohol increases sexual desire, while it blunts the moral sense and lowers the powers of resistance. It further increases indifference to the results of illicit intercourse and carelessness in their prevention.

It was found that among 179 cases of venereal disease the larger number included students (54), soldiers (31), officers (23), officials (13), teachers and physicians (6), while there were also 30 laborers and 10 prostitutes. Of the 169 cases in males, the attack of gonorrhea was acquired by 1 while in a state of chronic alcoholism, by 12 while in a state of acute alcoholic intoxication, by 42 while in a state of mild alcoholic stimulation and by 59 while in a state of sobriety; whereas syphilis was acquired by 64 while in a state of acute alcoholic intoxication, by 13 while in a state of mild alcoholic stimulation and by 36 while in a state of sobriety. Of the 10 prostitutes 6 were affected with syphilis and had been infected while intoxicated. The remaining 4 had attacks of gonorrhea, which were acquired in 3 while in a state of mild alcoholic stimulation and in the remaining 1 while in a state of sobriety. It thus appears that infection was favored by mild indulgence in alcohol in 43.8 per cent. of the males and in 90 per cent. of the females.

Among 219 other cases (190 in men and 29 in women) it was found that venereal infection was far more common in conjunction with occasional than with habitual alcoholic indulgence and that when present in cases of the latter it had generally been acquired before the habituation had been established. Less than one-quarter of the cases were in a state of sobriety and more than three-quarters were under the influence of alcohol when infection occurred, while one-half were in a state of mild alcoholic stimulation. Syphilis appeared to be much more common than gonorrhea in chronic alcoholics.

Infection occurred in 66 cases between 21 and 25 years of age, in 64 cases between 26 and 30 years, in 33 cases between 17 and 20 years and in 25 cases between 31 and 35 years. Of these 214 cases in which infection occurred, primary intercourse was illicit in almost all (192) and marital in but a few (7), the character not being ascertainable in the remaining 15. Of the first of these three classes infection was acquired in 79 while the individual was under the influence of alcohol and 74 while in a state of sobriety, while in 39 information on this point could not be secured.

It is properly not contended that the infecting coitus would not have taken place in all instances in the absence of alcoholic indulgence, but it seems likely that it would not have occurred in most instances, and that in those instances in which it had taken place precautionary measures would otherwise have been adopted that would greatly have lessened the risk of infection, and it is probable that in a number of cases in which it was stated that the patient was entirely sober there had really been some alcoholic indulgence, so that this fact would compensate for possible error on the other side.

The foregoing data, while perhaps not so extensive as they might be, merely confirm the conclusions arrived at from *a priori* reasoning and it would seem that an important means for the prevention of the venereal diseases, with their disastrous results, consists in the avoidance of alcoholic indulgence.

1. Wiener Med. Wochenschrift, 1901, Nos. 16, 17.

A NEW METHOD OF TREATMENT FOR INOPERABLE CARCINOMA OF THE BREAST.

The industry with which the study of carcinoma is being pursued raises the hope that we shall before long be made familiar with its causative agent and be thereby provided likewise with the means for its prevention and possibly also for its cure. The attainment of these objects is especially to be desired, inasmuch as carcinoma is one fortunately of a gradually lessening number of diseases in the face of whose treatment the physician stands almost hopeless and helpless. It is true that early and adequate surgical removal will in a gratifying proportion of cases be attended with permanent cure, but only time can then bring assurance that all morbid tissue and cells have been removed and that metastasis has not already occurred and recurrence or even redevelopment will not take place. For these reasons any method of treatment, however startling and unusual that promises amelioration, if not cure, and does not unduly imperil the safety of the patient should receive respectful and considerate attention, especially if it emanate from a reputable source. A suggestion along these lines has recently been made by Mr. Cecil H. Leaf, assistant surgeon to the London Cancer Hospital[1] with regard to treatment of cases of carcinoma of the breast that are unsuited for operation. He points out that with the exception of oöphorectomy, conjoined with the administration of thyroid extract, the measures heretofore employed have had little effect in checking the onward progress of the disease and that even by this means, although the growth may be temporarily arrested, no permanent good is effected, signs of renewed activity again becoming apparent after a time.

The principle proposed by Mr. Leaf consists in an attempt not to destroy the carcinoma cells, but to prevent them or the agent that causes their multiplication from passing along the lymphatics and invading the internal organs. For this purpose he applies over the new-growth or the recurrent nodules a large vulcanite shield adapted accurately to the skin and including as large an area of surface as possible. The shield is fitted at the bottom with a gauze India-rubber inflatable

1. Edinburgh Med. Journal, May, 1901, p. 452.

tube exactly similar to that of an ether-inhaler, and at the surface it is provided with a small tap to which can be adjusted any ordinary air-pump, so that the air in the apparatus can be thoroughly exhausted. By this means a force is provided that it is hoped will as long as it is in action constantly restrain the noxious agent from passing to the deeper lymphatics and thus prevent or delay dissemination. A glass window in the top of the shield will permit observation of the degree of suction that is being made. The apparatus should be worn as nearly constantly as possible. In addition, absolute rest for the arm on the affected side is insisted upon, to favor quiescence in the lymph-stream. The existence of ulceration is considered an advantage rather than a contraindication to the treatment, as the cells and juice are then more readily drawn to the surface and gotten rid of entirely. In the absence of ulceration it is encouraged by the constant use of boric-acid fomentations, which soften the fibrous tissue that is present, so that the channels in which the cells and carcinoma-juice travel become less constricted and the suction is then rendered more effective. It might even be advisable to make multiple punctures or incisions.

Three illustrative cases are reported in which the treatment was employed, but in none had sufficient time elapsed to permit of any but a tentative opinion; nor is any statement made as to the histologic characters of the neoplasm. The cases to which the treatment is thought to be adapted comprise those with ulcerating schirrus adherent to the pectoral muscles and enlargement, matting together and adhesions of the axillary glands, and those in which after one or more operations recurrence has taken place in the pectoral muscles or the lymph-glands or both.

THE ST. PAUL MEETING.

The last meeting of the AMERICAN MEDICAL ASSOCIATION was in many ways a remarkable one and successful in every way. The scientific work of the Sections, without exception, was of the highest quality, and the amount of work done in practically all of these scientific branches exceeded the average, although the total number of papers read was less than usual. While the papers in almost every instance were above the average in scientific interest and practical value the discussions were still more so.

The attendance at the Sections was very large, especially in the Sections on Surgery and Anatomy, on Obstetrics and Diseases of Women, and on Practice of Medicine. The number in attendance at each of these ran up as high as seven hundred at one time.

The subject of reorganization of the ASSOCIATION was one that created much interest and was the main topic of conversation outside of the Section work. The report of the Committee, as given in our issue of May 25, was accepted almost unanimously. The adoption of this new order of things will make the future meetings of the ASSOCIATION different in many respects from what they have been in the past. The elimination of the general meeting in the morning, after the first day, will give much more time for Section work, while the general meetings for the orations coming in the evening will interfere but little, if any, with the social functions. The possibility for more deliberate consideration of the important questions that come before the ASSOCIATION can not but result beneficially, but what is of most importance is the fact that it will bring the state societies into more direct touch with the parent association and with each other, the resulting good of which can not be overestimated.

While there was much fear on the part of many members that the city of St. Paul would not be capable of accommodating so large a body, these fears were not realized, for although there may have been a little crowding in some respects, as a rule, general satisfaction was expressed at the accommodations furnished for the members of the ASSOCIATION. The members of the profession of St. Paul and Minneapolis deserve the highest praise for the excellent manner in which they entertained their guests; the visitors will look back to the meeting of 1901 with satisfaction and pleasure. While the attendance was not quite as large as that at Atlantic City last year, which was the largest in the history of the ASSOCIATION, the meeting just closed, considering its geographical location, was well attended. The registration last year was 2019, while this year it was 1806.

THE EXCLUSION OF CONSUMPTIVE IMMIGRANTS.

The exclusion of tuberculous immigrants by the Government officials, at the port of New York, is on the whole a salutary measure, though scarcely for the reason popularly assigned. The inspection for tuberculous immigrants can not well be so thorough as to cull out all infected individuals, and the most that can be expected from it is the exclusion of more or less advanced cases, where the physical and rational signs are sufficiently obvious. Anything more rigid than this would meet with difficulties and probably be very imperfectly carried out. Nothing short of a tuberculin test would absolutely exclude all cases, and we doubt whether the Government will adopt that precaution. If it did, it is we believe safe to say, it would be the most efficient check on immigration possible, and we might perchance find only the minority passing it successfully. The exclusion of consumptives is excusable on the ground that it is not the policy of this country to accept immigrants who, being hopelessly diseased, are practically incapable of becoming useful members of society and liable therefore to be a burden to those among whom they come. This reason therefore applies to advanced and presumably incurable cases. It will undoubtedly work hardship in individual instances and there should be some discretion allowed. Even hopeless consumptives may sometimes bring some good; a rule that would have sent Robert Louis Stevenson back to Scotland is scarcely to be followed without exceptions. It would be well if

we could apply a still more rigid test to exclude the syphilitic, the epileptic, the insane and the criminal immigrant, in fact the degenerate classes generally, from our shores. At present we have more than our share of Europe's output in that line.

CORONER'S JURY VERDICTS.

The beauties of "crowners' quest law" are continually being illustrated. In a trial just closed in one of our cities it appeared that a reported inquiry over a suspicious death was probably never legally made; the verdict was made up with apparently fictitious names, by the deputy coroner, a politician who evaded summons and could not be found. The body had been promptly cremated and any evidence of foul play thus pretty thoroughly destroyed. This illustrates the rascally side of the present system and leads to a strong suspicion that "fake" inquests may be more common than has been supposed. An inquest really amounts to very little in the majority of cases; the jury contributes only an element of ignorance, and it is not surprising that an unprincipled ward-politician, such as many of our city coroners and coroner's deputies are, concludes occasionally to dispense with it and pocket its fees. What a jury can do in the way of irrationality, on the other hand, is shown in a recent verdict in another city where an inquest was held on a severed head of a human being and a verdict rendered of suicide. The paper from which we have the latter account says: "It was not a ghastly joke, such as was perpetrated by a jury in a southern town the other day, where after inquiring into the death of a negro who had been insolent to a white man, the verdict was given out that the man had committed suicide." That was the brutal humor of the participant after the act, the deliberate condonation of homicide. In the other we have the perhaps worse than stupid, the absolutely thoughtless routine acceptation of the first suggestion that offered without regard to facts. All these only indicate the average worthlessness of the coroner's inquiry and the need of reform. Not only justice but common decency call for a change, and the medical profession is the motive force which must inaugurate the much-needed reform. When we begin, as a profession, to recognize and take up our public responsibilities, the removal of this important function from the hands of incompetent and often worse than incompetent politicians will not be one of the least important benefits that we can endeavor to confer upon our fellow-citizens.

THE CAUSE OF DEATH FROM PERFORATIVE PERITONITIS.

While the conditions under which peritoneal infection takes place have been quite clearly established, a like statement can not be made with regard to the cause of collapse and death in the presence of peritonitis. Inflammations of other serous membranes do not, as a rule, terminate fatally, so that there must be some special reason for such an outcome in cases in which the peritoneum is involved. This was at one time thought to reside in reflex influences, but at the present day the opinion prevails that it is due to intoxication resulting from the absorption of the morbid products of bacterial activity, or to the taking up and dissemination of the bacteria themselves. Either of these events, it is thought, may take place even before the local lesions have become obvious. It has, however, been shown that irritation of the peritoneum may induce reflex reduction in the blood-pressure, with resulting heart-failure, while, on the other hand, bacteria have been found in the blood, often in conjunction with almost negative local conditions. In order to determine so far as possible the exact mechanism by which the evil results of perforative peritonitis are brought about Heineke[1] undertook an experimental investigation, using rabbits for this purpose. Through a small opening in the abdominal wall a loop of small intestine was brought out, a small laceration made, hemorrhage controlled, the bowel returned, and the abdominal wound closed. The animal soon recovered, but in the course of from six to eight hours symptoms of peritonitis made their appearance, shortly terminating fatally. As a result of this study it was found that death under the circumstances detailed was due to paralysis of the centers in the medulla oblongata, involving principally the vasomotor and largely the respiratory. Marked disturbances in circulation were observed earlier than those of respiration, although breathing ceased before the heart's beat. The circulatory disturbances are attributable to the paralysis of the vasomotor center, the heart not being directly affected. They are entirely analogous to those attending the infectious diseases. The paralysis of the nervous centers is due to the absorption of bacterial products from the peritoneum into the blood, the perforation of the bowel as such not inducing any circulatory disturbance.

FOURTH OF JULY TETANUS.

For some years past the increasing use of various explosives in order to celebrate our day of national independence, the Fourth of July, has been followed by a noteworthy number of fatal cases of tetanus, especially among the youth in our large cities. According to Wells,[1] 27 boys, ranging in age from 10 to 17 years, died from Fourth of July tetanus in Chicago last year. In all but one case the atrium was a wound, generally of the hand, produced by blank cartridges, the exception being a wound from a toy cannon. The period of incubation varied from five to nine days, death resulting in from six to eleven days after the accident. The infection seems to have been of a decidedly virulent type. Wells set about to discover the exact etiology of this sad accompaniment of patriotic exuberance. A careful and extensive study of the different materials in blank cartridges on the market in 1899 and again in 1 00 failed to reveal tetanus bacilli in a single cartridge. Now, tetanus is endemic in Chicago, and presumably also elsewhere, and in the cases that follow wounds other than those incident to the use of explosives, the bacilli are unquestionably introduced by means of dirt. Wells readily found tetanus bacilli in Chicago street dirt, and so its stands to reason that the lodgment of the wadding of blank cartridges under the skin of the hands and elsewhere is exceedingly liable to carry in

1. Deutsches Archiv für Klin. Med., 69 B., 5, 6, H., p. 429.
1. Medical News, 1901.

bacilli present in the dirt and other foreign substances upon the surface of the skin. The resulting wound is usually long and narrow; blood-clots and infiltrated tissue are present, as well as ordinary aerobic, oxygen-consuming bacteria—all favoring proliferation of the anaerobic bacillus of tetanus. As the matter stands, a Fourth of July wound of this character places a grave responsibility upon the physician who is consulted. From the information gathered in the timely article by Wells it appears that physicians in general are not always as painstaking and thorough as they should be in cleansing cartridge wounds and in removing the last vestige of extraneous substances, especially pieces of wadding. Veterinarians report excellent results from the use of tetanus antitoxin as a prophylactic in horses, but its employment for this purpose in man has been neglected too much so far, probably because of the rather disappointing results of its use as a curative agent after the intoxication has become apparent and lockjaw established. In the future all wounds caused by explosives such as are in vogue on or about July 4th, should be rendered surgically clean as early as possible, and drained freely; for this purpose the wounds should be freely exposed by liberal incisions wherever indicated, so that free access is gained to the innermost recesses of the wound in order that wadding and dirt may not remain and favor the growth of bacilli. As tetanus may occur even when wounds are well cleansed and drained, tetanus antitoxin is indicated, and the prophylactic dose suggested by Wells is 5 c.c. This is certainly an ample quantity. Finally, physicians should use their influence in favor of some less harmful outlet for patriotic enthusiasm than the production of noise.

THE CREMASTERIC REFLEX IN SCIATICA.

A study of the reflexes is often capable of yielding important information in the diagnosis of disease, especially involving the nervous system. The presence of a given reflex will be dependent upon the integrity of the arc constituted by an afferent nerve, the related portion of the cerebrospinal axis and an afferent nerve. Reflex activity is normally somewhat restrained by physiologic inhibition, and it may be reinforced or intensified by influences that lessen the latter through sensori-motor or psychic channels, while it is exaggerated in the presence of irritative conditions and lesions in the course of the sensori-motor arc. The appearance of the reflexes may be prevented by mechanical influences, such as rigidity, by increased inhibitory activity from whatever cause, or by abolition of any portion of the sensori-motor arc. Inasmuch as pain tends to reinforce reflex activity, one is prepared to learn that this manifestation is generally increased in cases of neuralgia and—at an early stage before degenerative changes have taken place—even when this is of inflammatory origin. In this connection we wish to refer to a recent communication by Dr. G. A. Gibson[1], in which attention is called to a remarkable exaggeration of the cremasteric reflex in cases of sciatica, not alone in those of the more serious neuritic type of the disease—attended with muscular wasting and alteration in the electric reactions—but also in those of the less grave neuralgic variety. The reflex was obtained not only by gently stroking the skin on the inner aspect of the thigh, but also and much more readily by firm pressure over the lower and inner portion of Scarpa's triangle, whose sensory nervous supply is derived from the internal cutaneous branch of the anterior crural nerve. The latter procedure was in some instances followed slightly later by a less distinct contraction on the opposite and unaffected side. The exaggeration of this reflex was found in cases not exhibiting much increase in the knee-jerk, as well as in others with great augmentation of myototic irritability. In some instances the plantar and gluteal reflexes were exaggerated equally with the cremasteric; in others the last was marked, while the former were scarcely elicitable. In no instance was the increase in the cremasteric reflex associated with dorsal flexion of the toes on irritation of the sole of the foot. In explanation of the phenomena described it is suggested that in the presence of sciatica the segments of the cord above the level of origin of the sciatic nerve from the lumbo-sacral cord—including therefore the second lumbar, in which the cremasteric reflex center and also the knee center are believed to be situated—are in a state of excessive irritability, while the segments below—in which the plantar, the gluteal and the ankle centers are situated—are but little if at all influenced.

1. Edinburgh Med. Jour., May, 1901, p. 459.

Medical News.

ILLINOIS.

The Physicians of Sterling met May 24 at the office of Dr. Frank Anthony, to endeavor to establish a uniform fee-bill.

Dr. Miles D. Baker has been appointed first assistant at the Illinois Southern Hospital for the Insane at Anna, and Dr. David R. Sanders, Jonesboro, superintendent of the annex.

Chicago.

Dr. Gustav Fuetterer, who has been professor of pathology at Northwestern University Medical School for the past two years, has resigned.

Dr. Christian Fenger was made an honorary member of the Association of Military Surgeons of the United States, at its meeting May 31 in St. Paul.

"Dr." Orlando E. Miller, of O. E. Miller Hernia Treatment Company fame, seeks, by due process of law, to be relieved of an indebtedness of $586,943. He has no available assets.

Dr. E. S. Pettyjohn, who has been abroad for a year studying in Berlin and Vienna and visiting hospitals, sanatoria and mineral springs, sailed for New York, May 23, on the *Potsdam*. He intends to locate in Chicago, making a specialty of nervous diseases.

In the "Bulletin" for the week ended May 25 it was said that "it is not probable that the total deaths for the month will much exceed 2000." The actual number is 2046, giving an annual mortality rate of 13.7 per 1000 of the estimated mid-year population, to-wit, 1,758,025. For the week the total deaths were 472 and the annual rate was 13.99. Only measles, among the more important causes of death, continues to give any concern. Attention has been called in three previous bulletins to the unusual prevalence and severity of this disease and advice given against exposing children to its contagion. During the past week there were 10 deaths reported from this cause, 7 of them being fatally complicated with whooping cough—which disease also continues to prevail to an unusual extent.

IOWA.

Dr. Charles B. Adams, Estherville, has been elected president of the State Board of Medical Examiners.

Dr. John C. Shrader, Iowa City, has been re-elected president, and Dr. Josiah F. Kennedy, Des Moines, secretary of the State Board of Health.

Barnes Graduates Admitted.—The State Board of Medical Examiners has decided to admit to examination the two graduates of Barnes Medical College of St. Louis who were refused examination a short time ago by the secretary on the ground that the college did not live up to the requirements of the state law.

MARYLAND.

Dr. **Delmar Smithers** was elected president of the Chesapeake City Town Commissioners, June 4.

Dr. **Harry S. Jarrett**, of Towson, has been elected president of the first board of pension surgeons at Baltimore.

Baltimore.

John L. G. Lee, B.A., LL.B., has been elected president of the faculty of the Woman's Medical College.

Dr. **George H. Stewart** has succeeded Dr. S. Pe:ehy Lataré as medical superintendent of the Maryland University Hospital.

Gone to Europe.—Among those who have left for Europe are Drs. Richard H. Thomas, Joseph Erlanger and Samuel C. Chew.

The Johns Hopkins Register for 1900-1901 just out shows 200 students in the medical departments and 149 graduate students.

Drs. **Mary Cook Willis and Jessie M. Thornton** have been elected resident physicians of the Good Samaritan Hospital for the ensuing year.

Dr. **William Osler** will visit Holland this summer and will especially be interested in the University of Leyden, so full of reminiscences of Boerhaave and other medical worthies of the 18th century.

Dr. **William Royal Stokes,** city bacteriologist, has been elected professor of pathology and bacteriology in the College of Physicians and Surgeons, of Baltimore. Prof. N. G. Keirle retains the chair of medical jurisprudence and the directorship of the Pasteur Institute connected with the college.

The Woman's Medical College Association elected the following officers: President, Dr. Flora Pollack; vice-presidents, Dr. Mary Lois Jones; recording secretary, Dr. Marie Thalwitzer; corresponding secretary, Dr. Jessie M. Thornton; treasurer, Dr. Mary Willis.

The graduating class of the Johns Hopkins Medical School is by far the largest in the history of the university. In it are representatives from all parts of America, India and Hawaii. The class number 56, consisting of 47 men and 9 women. The examinations closed May 31, the commencement, June 7.

The following appointments have been made at the Johns Hopkins University: Fellowship in the Medical School provided by the liberality of the Baltimore Association for the Promotion of the University Education of Women, Florence R. Sabin, M.D., Fellowship in English, Louis Wardlaw Miles, A.B., M.D.; Fellowship in pathology, Dorothy M. Reed, B.L., M.D.

The mayor has appointed the following as a municipal hospital commission to provide for the building of an infectious disease hospital: The mayor, health commissioner, Mr. Henry Williams and Drs. Wm. H. Welch, I. Edmonson Atkinson, John D. Blake and John W. Chambers. The commission will select a suitable site, arranging for its purchase and preparing preliminary plans for erection of building.

Johns Hopkins' New President.—The selection of Professor Ira Remsen, professor of chemistry in Johns Hopkins University, to succeed Dr. Daniel C. Gilman as president of that institution, has been made public. Professor Remsen has held the chair ever since the foundation of the institution in 1876, and his works and researches have given him a world-wide reputation. His executive ability has been manifested not only in the development of his own department, but while acting president on several occasions during the absence of President Gilman he has displayed qualities that have strongly commended him to the Trustees. He is a man of mental breadth as well as common sense and scientific attainments, and it is believed that his administration will mark the beginning of a new era in which the University will emerge from the difficulties that have surrounded it for some time past and enter upon a period of increased strength and usefulness. It is understood that Prof. Remsen will continue to direct the chemical laboratory. Prof. Remsen was born in New York City in 1846. He studied at the College of the City of New York and was graduated in medicine from the College of Physicians and Surgeons in 1867. He then studied abroad in the Universities of Munich and Göttingen for three years, receiving the degree of Doctor of Philosophy at the latter in 1870. From 1870 to 1872 he was assistant in chemistry to Prof. Fittig in the University of Tübingen. In 1872 he was made professor of chemistry and physics in Williams College, Massachusetts, where he remained until called to the Johns Hopkins in its opening in 1876. Dr. Remsen is one of the best lecturers in the University, and takes the deepest interest in the researches of his pupils. His best known work is on the relations between oxygen, ozone and active oxygen, the influence of magnetism on chemical action and the discovery of saccharin. He founded in 1879, and has since conducted, the *American Chemical Journal*. His works have gone through several editions and have been translated into German, Italian and French. They are used as text-books in many colleges of England, Germany, Australia and America.

MASSACHUSETTS.

Leominster has provided two houses to be used as an isolation hospital.

Carney Hospital, Boston, will receive $56,500 from the estate of Julius Adams.

Dr. **Michael J. O'Meara,** Worcester, has been made physician at Holy Cross College, vice Dr. Charles F. Fitzgerald, resigned.

The Newton Hospital and other institutions in Newton benefit to the extent of $46,000 by the will of the late Mary Shannon, a resident of that place.

The King's Daughters and Sons' Hospital, Springfield, has applied to change its name to "The King's Daughters and Sons' Hospital Company, of New England." It was also voted to so enlarge the hospital that space might be secured for incurable patients.

MISSISSIPPI.

Dr. **E. Knox White,** formerly of Steen Creek, has been appointed health officer of Simpson County.

Smallpox caused 456 deaths in Mississippi out of 2066 cases reported in the first six weeks of the year, a death-rate of about 20 per cent.

Dr. **William W. Payne,** Meridian, was reappointed division surgeon of the Mississippi Division United Confederate Veterans, May 20.

Dr. **James W. Lipscomb,** Columbus, has been appointed health officer of Lowndes County, succeeding Dr. John Brownrigg, who declined reappointment.

NEW YORK.

Dedication of Loomis Buildings.—On May 28, Bishop Potter consecrated the Church of St. Luke, the Beloved Physician, and dedicated the buildings of the Loomis Sanatorium at Liberty.

Buffalo.

Dr. **Lorenzo Burrows, Jr.,** of Buffalo, has been appointed a member of the Buffalo Board of Pension Examining Surgeons, vice Dr. F. W. Abbott, deceased.

Measles Among the Eskimos.—There is a small epidemic of measles existing among the Eskimos located at the Pan-American Exposition. There have already occurred a number of deaths from this disease.

Dr. **Irving M. Snow,** of Buffalo, invited the members of the American Pediatric Society from Niagara Falls to visit the Pan-American Exposition, and to dine at "Alt Nuernberg." A number of Buffalo physicians were asked to meet the visiting guests and a very enjoyable evening was passed on the Exposition grounds.

New York City.

Another Surgeon's Mistake.—On May 21, a wealthy real-estate dealer, of New York, who had suffered for two years from epilepsy, was taken in a patrol wagon to the Bedford avenue police station and locked up in a cell while in a semi-conscious condition. Two surgeons of the Williamsburg Hospital considered him intoxicated and he was held under a charge of intoxication.

New Water Supply Needed.—Persistence of typhoid fever in New York City proves that the health of the community requires a new source of supply. The watershed of the upper Hudson seems far away, but there is no nearer route by which pure drinking water can be obtained. An aqueduct from Lake George would cost $100,000,000, but this is a sum not considerable as the price of the health of millions.

Rockefeller Institute for Medical Research.—The United States is to have an institution for medical research similar to the famous Pasteur Institute of Paris and the Koch Institute

of Berlin. John D. Rockefeller has provided $200,000 for preliminary work on the project, and is expected to endow it when plans are finally agreed upon. It will be located in this city, with branches in every large city in the country. It is to be called "The Rockefeller Institute for Medical Research," and has been incorporated. The purpose of the foundation is to furnish facilities for original investigation, particularly in medicine and hygiene as have a practical bearing upon the prevention and treatment of disease. The board of directors as at present constituted is as follows: Dr. William H. Welch, Baltimore, president; Dr. T. Mitchell Prudden, New York, vice-president; Dr. I. Emmett Holt, New York, secretary; Dr .C. A. Herter, New York, treasurer; and Drs. Theobald Smith, Boston, Simon Flexner, Philadelphia, and M. H. Biggs, New York.

NORTH CAROLINA.

Dr. William H. Cobb, Jr., has been elected city physician of Goldsboro.

North Carolina Medical College, Davidson, held its eighth annual commencement exercises, May 13, graduating a class of eight.

Dr. William D. McMillan, Wilmington, on May 6, was unanimously re-elected superintendent of health of New Hanover County.

State Board of Health.—The governor has appointed the following members of the board: Dr. Richard H. Lewis, Raleigh; Dr. Francis Duffy, Newbern; Dr. George G. Thomas, Wilmington, and Dr. William P. Ivey, Lenoir.

OHIO.

Cincinnati.

Cincinnati Academy of Medicine.—The regular meeting was held in the amphitheater of the Cincinnati Hospital, May 27, at the invitation of the Board of Trustees. The occasion was the official opening of the new laboratories. Speeches were made by Dr. P. S. Connor, on behalf of the Board; Dr. N. P. Dandridge, president of the Academy; G. A. Fackler, president of the hospital staff; J. E. Greiwe, director of laboratory.

The medical staff of the Cincinnati Hospital held its annual election of officers on May 30. The result was as follows: Dr. G. A. Fackler, president; Dr. B. K. Rachford, vice-president; Dr. Arch I. Carson, secretary; Dr. P. S. Connor, librarian.

The Society of Ex-Internes of the Cincinnati Hospital held their fifth annual meeting and banquet on June 1. About sixty were present. Dr. D. I. Wolfstein acted as toastmaster, and toasts were responded to by Drs. John H. Landis, Joseph Ransohoff, W. E. Crane, William Muehlberg, and S. E. Allen. Dr. A. B. Thrasher was elected president for the ensuing year.

Presbyterian Hospital Staff.—At the annual meeting, June 3, Dr. W. H. Taylor was elected president for the coming year; Dr. E. Campbell, vice-president, and Dr. Estella Riley, secretary. Dr. D. I. Wolfstein, formerly professor of pathology in the Ohio Medical College, has resigned to accept the chair of neurology at the Cincinnati College of Medicine and Surgery.

PENNSYLVANIA.

An isolation hospital has been prepared for the reception of smallpox patients on the county almshouse farm, east of Lebanon.

Two New Hospitals.—By an agreement of legislators, Western Pennsylvania is to have two new hospitals. The West Penn Hospital, Pittsburg, toward which the state will give $200,000 provided the hospital secures a like amount, and the Allegheny General Hospital, which has already raised $200,000, to which the state will add $100,000.

Philadelphia.

St. Joseph's Hospital Internes.—The following are the successful applicants for interneships at St. Joseph's Hospital: Drs. Foulkrod, Rigel, Homer Rhode, Mervin R. Taylor and Lamott.

Reunion of Class of 1891.—Dr. Matthew M. Smith, Austin, Texas, president of the class of 1891, Jefferson Medical College, has called a meeting of the class to be held in Philadelphia, June 28 and 29.

Dr. A. Donaldson Smith, at a recent meeting of the Royal Geographical Society, received the Patrons' medal for his journey to Lake Rudolf, south of Abyssinia.

Unclaimed Dead.—The distribution of unclaimed corpses to the various medical colleges for dissecting purposes has produced friction between the State Anatomical Board and the pathological section of the Medical Board of the Philadelphia Hospital, which claims that mutilated bodies have been given to the colleges.

VIRGINIA.

Dr. B. Lawrence Taliferro, Richmond, sailed for Europe, May 8, to pursue special studies abroad.

Dr. Jefferson R. Kean, U.S.A., of Richmond, Va., has received his promotion and is now a major of the medical department in the regular establishment.

Dr. Buckner M. Randolph, Jr., Richmond, who has recently been made dean and director of the laboratory of the Polyclinic Hospital, Philadelphia, has sailed for Europe for a study-trip of three months.

University College of Medicine, Richmond, Va., held its commencement exercises May 2 and graduated a class of 72. Prof. Charles D. McIvers, president of the State Normal and Industrial College, Greensboro, delivered the address on "The Best Field for Investment in the South."

The Medical College of Virginia, Richmond, held its sixty-third annual commencement exercises, May 9. The graduating class numbered 55. Dr. Willis G. MacDonald, Albany, N. Y., delivered the doctorate address.

Dr. James B. McCaw, one of the oldest physicians in Richmond, on the occasion of his retirement from active practice, issued the following announcement: "Dr. J. B. McCaw having arrived at years of discretion, and remembering that he has been a doctor of medicine for fifty-seven years, announces to the public that he goes on the retired list on and after this date. He would be ungrateful if he did not take this opportunity to return thanks to the good people of this community who have shown their confidence in him and his forefathers for four generations—from 1786 to 1901."

WASHINGTON.

Everett Physicians have formed an association to guard against quackery and to establish a uniform schedule of fees.

The Sisters' Hospital, built on the line between Fairhaven and Whatcom, was recently opened. It contains 48 rooms and 4 wards, and will accommodate about 40 patients. It is fitted up with the most modern equipments and is a model of its kind. The building as it stands cost about $27,000.

Walla Walla Hospital will receive $10,000 under the terms of the will of the late Joseph Conatser, of Colfax, and may receive the entire estate, valued at $60,000 to $75,000, in case heirs should not appear. The bequest is conditional on the change of name of the hospital to "The Joseph Conatser Walla Walla Hospital.

WISCONSIN.

Milwaukee Medical College graduated a class of 39, May 1, at its seventh annual commencement.

Dr. Bruno L. Schuster, Milwaukee, has returned from Europe, where he has been studying for some time in Berlin and Budapest.

St. Elizabeth's Hospital, Appleton, dedicated its new building May 9. The building cost about $75,000, and has a capacity of 75 to 80 beds.

Wisconsin College of Physicians and Surgeons.—The eighth annual commencement of this college was held at Milwaukee, May 11. A class of 18 received diplomas. The doctorate address was delivered by Dr. Walter Kempster.

Medical College not Exempt.—The application of the Milwaukee Medical College to permanently enjoin the City of Milwaukee from collecting taxes, has been denied and the city is taking steps to collect the taxes for 1901, which amount to $1857.36.

Compulsory Vaccination Bill Vetoed.—Governor La Follette has vetoed the Collins compulsory vaccination bill, as he does not believe an emergency exists which demands a law repugnant to so many good citizens!

WYOMING.

Licensed Physicians.—The records of the State Board of Health show that Wyoming has 136 licensed physicians.

The Quaker Doctor's Suit.—A case of more than usual interest to the medical profession was tried at the April term of the district court of Uinta County at Evanston. In November, 1899, a traveling representative of the Quaker Medicine Co. of Portland, Ore., styling himself "Quaker doctor" was tried before a justice of the peace charged with selling medicines and nostrums. While the evidence was conclusive as to

his guilt the justice, for reasons best known to himself, discharged the defendant. Several days later he was charged with practicing medicine illegally. This second charge was dismissed as the attorney for the defendant convinced the justice that his client was being tried the second time for the same offense. As a result of these unsuccessful prosecutions, the so-called "Quaker doctor" brought a suit for $20,650 damages against Dr. E. E. Levers, of Spring Valley, Wyo., and Drs. T. L. Wicks, C. H. Solier and F. H. Harrison, of Evanston, Wyo., charging malicious prosecution. The trial developed the fact that these gentlemen were acting only in compliance with the written request of the State Board of Medical Examiners and no motive was shown to have existed. It was also clearly demonstrated that the plaintiff was actually practicing medicine. The jury promptly brought in a verdict for the defendants.

CANADA.

Smallpox at Hamilton.—The disease has appeared at Hamilton, Ont., where five cases have been located. A general vaccination has been ordered.

Smallpox at Toronto.—Three new cases of smallpox were discovered in Toronto last week. Dr. Sheard has requested that $5000 be immediately placed at his disposal for meeting emergencies promptly.

Doctors' Assessments.—The Ontario government has responded to the request of several physicians for a test case being submitted to the courts with regard to the validity of the assessment tax of the Medical Council. This will stay the hands of the Council until such time as a decision can be arrived at.

Montreal General Hospital Elections.—President, Mr. James Cathern; vice-president, Mr. Harry Stikeman; treasurer, Mr. S. H. Ewing; secretary, Dr. F. G. Finley; physicians: Drs. W. A. Molson, A. D. Blackader, F. G. Finley and H. A. Lafleur; surgeons: Drs. F. J. Shepherd, G. E. Armstrong, J. Alexander Hutchinson and J. M. Elder.

Convocation at Trinity.—Convocation exercises were held at Trinity University, Toronto, on the afternoon of May 31, when 52 graduates received their degrees in medicine. On the following afternoon similar exercises were held at Trinity Medical College, when a like number received the diploma of the College and subscribed to the fellowship oath.

Smallpox in Winnipeg.—On May 24, all the smallpox cases in Winnipeg were recovering and quarantine was raised on that date. The patients were removed from the pest-house and quarantined in a tent some distance from that place. They will be kept there for a fortnight before being permitted to re-enter the city. On the following day two new cases were discovered in the city, two brothers who had just arrived from Edmonton, N. W. T.

Convocation at the Manitoba Medical College.—The medical graduates of the Manitoba Medical College received their diplomas on Thursday afternoon, May 23. Dr. H. H. Chown, in presenting the graduates, hoped to see the time when a B.A. would be the requirements for matriculation; and that the five-year course would soon be established in Winnipeg as in eastern Canada. Ten were graduated M.D.'s; four, degrees of C.M. There was a considerable number of unsuccessful candidates.

Halifax Board of Health.—The Halifax Board of Health held a meeting on the afternoon of May 23, when it was reported that the city was free from contagious diseases and that there were no patients at the Infectious Disease Hospital. Dr. Venables wrote the Board in reference to his campaign of vaccination. He had recently covered a large territory and had met with great opposition in many quarters. In fact, in one section of the city he had received a personal attack in the discharge of his duties.

Montreal Foundling Hospital.—The annual meeting of this institution was held last week. The treasurer's report showed that the receipts for the past year amounted to $6951 and the disbursements to $6762, leaving a balance on hand of $189. The medical report stated that there were in the hospital on the 15th of May last 36 babies, and there had been admitted since 137, making a total of 173, or an increase over the previous year of 22. Very nearly one half of the babies admitted were under one week old, and of these 31 were under twenty-four hours.

Western Hospital, Montreal.—The annual meeting of this institution was held on May 28 and the reports show that this hospital has just passed through the most successful year in its history. The annual report stated that the debt had been reduced in the year from $10,000 to $8000, and this while great improvements had been made in the building, including new operating instruments and anesthetic rooms fitted up with electricity and all other modern appliances. As soon as the debt has been completely wiped out it is the intention to enlarge the buildings.

The Physicians of Three Rivers, Quebec.—On May 30, some 43 physicians responded to an invitation to meet in the city of Three Rivers, to organize a district medical association for the advancement of the profession, the study of Dr. Roddick's bill and other like measures. The meetings will be held monthly, the next being held on June 24. The following officers were elected: Honorary president, Dr. Desaulniers, of Nicolet; honorary vice-president, Dr. Grenier, of St. Maurice; president, Dr. L. P. Normand; first vice-president, Dr. Marchand; second vice-president, Dr. H. Trudel; treasurer, Dr. J. H. Leduc; secretary, Dr. C. E. Darche.

Sickness in Ottawa.—Mr. Chancellor Boyd has just issued judgment, given in Toronto, restraining the city of Ottawa from building the new contagious disease hospital on the property of the parks commissioners. This may have a serious affect upon the city of Ottawa, as at the present time there are said to be numerous cases of infectious diseases in the city and no hospital to which to take them. The provincial board of health had condemned the old site at Porter's Island, besides which the buildings there are not fit for use. It would look from this judgment as though Ottawa could not establish a permanent hospital for contagious diseases. The rules regarding the proximity of other buildings are also very strict in that city and the suburban places object to the presence of a contagious disease hospital in their midst.

FOREIGN.

At Moscow two new medical scholarships have recently been founded by the widows of two prominent physicians.

Plague at Capetown.—The total number of cases up to June 9 were 700, with 326 deaths. Of these, 119 were white, almost equally divided between colonists and Europeans.

Plague at Hong Kong.—According to a cable dispatch, the epidemic is increasing. The Asiatic cases average 40 daily, and the Europeans 12. The medical staff of the board of health is numerically inefficient.

A Moscow physician, according to the *St. Petersburg Med. Woch.*, charged with inoculating three of his patients with syphilis, has been condemned by the courts to six months of imprisonment and loss of all his professional privileges for a certain length of time.

Plague in India.—For the week ending April 27 there were 4093 deaths against 6304 for the week ending April 20. In Bombay the number of deaths was 403, fewer by 56 than in the previous week. In the Bombay Presidency the deaths have fallen from 570 to 468; in Calcutta from 389 to 215, and in the Bengal presidency from 3258 to 1707. In the Punjab and Kashmir there has been a slight increase, the figures having risen from 518 to 547 and from 25 to 33 respectively.

Hospitals of Vienna.—The City Council has given its approval of the improvement of the city hospitals, and contemplates, it is said, the expenditure of a large sum of money therefor. This will be in connection with the Wiener Allgemeines Krankenhaus. The late Professors Billroth and Albert protested against the limited space and the disturbance due to street traffic.

French Population Slowly Increases.—It is expected that complete official figures of the recent census of France will be published in a few days. Paris has a population now of 2,660,000, showing an increase of 149,000 since 1896. The entire country will show only about 500,000 increase in five years. This, from a military standpoint, shows unfavorably with Germany's increase of 800,000, Austria's 450,000, England's 450,000, and Italy's 400,000, each within a period of twelve months.

Beri-beri in Japan.—In 1883, the last year of the old system of diet, there were 1236 cases out of a force of 5346 men in the navy, or a ratio of 231 per 1000 of force; the deaths were 49. In 1898 the number of cases was 16 out of a total of 18,426; the mortality was one. Now, by a judicious system of diet, beri-beri may be regarded as driven out of the navy

altogether. The daily food of a man in the Japanese navy is now approximately one-half pound of bread, two-thirds of a pound of meat, two-thirds of a pound of rice, five-sixteenths of a pound of vegetables, plus small quantities of fish, tea, sugar, roasted barley, etc. The average weight has increased from 121 pounds, approximately, in 1884, to 130 pounds in 1988.

Recrudescence of Diphtheria in Paris.—The number of cases amounted to 1262, with 225 deaths, during the first four months of 1901, while there were only 563 cases, with 121 deaths, during the same period last year. The Minister of the Interior has issued an order that physicians should not wait to obtain fresh antidiphtheria serum, but inject at once some of the obtainable supply. When the injection is made the day the false membranes first appear, the mortality of diphtheria, he states, is less than 2 per cent. It is 6 per cent. when the injection is made the second day, and rises to 30 per cent. when the injection is delayed till the third day, and to 50 and 60 per cent. the fourth day and thereafter. Some of our Paris exchanges comment on this "Compulsory Serum Treatment" as a measure more autocratic than a despot would dare to promulgate, but the *Progrès Médical* approves of the motive inspiring it.

PARIS LETTER.

Cocain in Maternity Cases.

Cocain in maternity cases has been tried by several accoucheurs in Paris. Doleris, who is well known to gynecologists in America, has been employing it in his service at the Boucicaut Hospital. The number of cases reported in the thesis of his assistant, Dr. Malartic, is 62. The usual dose was one centigram, sometimes two. The results were good in 52 cases, and bad in 10. Dr. Malartic established the following conclusions: Analgesia lasts about two hours, the uterine contraction is excited, especially immediately after the injection, retractility is also induced; there is a certain hemostatic action, and lastly a slight degree of action on the contractions even outside parturition. As a result of this, intramedullar cocainization is the best anesthetic in all obstetric operations, with the exception of version. It is counterindicated in cases of pregnancy, on account of its abortive influence. It may be used in cases of parturition where there is much pain, as a hemostatic, as a means of inducing labor, for instance in eclampsia. Dr. Doleris used this method in a case necessitating Cesarean section, and the action on the uterus was so pronounced that it was not necessary to check the bleeding after extraction of the child, as is usually done, by compression at the neck of the uterus.

Mortality Among Parisian Physicians.

The statistics concerning the number of deaths of the medical body in Paris are published every three months, and they tend to show that a large proportion of them are due to diseases contracted in the profession. Out of 71 deaths 38 are due to consumption and kindred affections. Out of 14 physicians 3 died of diabetes and two committed suicide; one died from morphinomania.

Novel Will Tending to Improve Race.

The recent laws concerning marriage which have been proposed in Indiana and Minnesota have been outdone by the terms of a will made a few months ago by Count Saint Ouen de Pierrecourt, an inhabitant of Rouen, who has left his estate to the town under the following conditions: Every year $20,000 will be given to a married couple who will be chosen for their size and strength. The man and his wife will have to be examined by the physicians of the town, and the latter will report as to their condition.

Remarkable Case of Deception.

There has been a good deal written recently in the French newspapers about a young woman at St. Germain who had needles coming out from different parts of her body. She said that she had swallowed a package of needles some five years ago, and they were only just beginning to come. The physician and the druggist had already removed 50 needles, when some one told her that the pricking of the skin would be the cause of serious inflammation. The phenomenon stopped very soon after, and as the needles were always found on the left side and always came out by the blunt end, it was shown that she had been practicing deception.

Invention of the Stethoscope by Laennec.

In the last number of the *Chronique Médicale* the manner in which the stethoscope was discovered is described by Dr. Gorgon. Laennec, who was always very punctilious about examining young women, was taking care of a girl 18 years old who had some lung affection. One day he was going to see his patient and was crossing the court of the Louvre, where some children were playing about some long timbers and striking them so that others at the other end might hear the knock. Laennec was holding in his hand a roll of papers. The idea came to him to use it in like manner while examining his patient. He later found it more advantageous to use a solid piece of wood, which was ultimately transformed and became the modern stethoscope. Most French physicians auscult directly without any instrument, but they use the stethoscope for certain heart lesions. The double stethoscope, which is employed in England and America is rarely seen in France.

Sanatoria for Consumptives.

Sanatoria for tuberculous patients are not common as yet in France. There are a few established in the southern part of France, but they are more for wealthy patients, and we do not see in France what has been established in Germany during the last four years, sanatoria for workmen where the expenses are only three marks a day. There are already 43 sanatoria of this type in Germany, and 19 more will be finished in 1902. This number will be ultimately increased. A fact worthy of notice is that these sanatoria are built by the state, as an outcome of the insurance made by law in the case of certain laborers. It is useless counting upon private charity to find the necessary funds to build the sanatoria that will be found necessary. Another point is that whereas in Germany the cost of construction and the money needed to run such establishments seem to be comparatively small, in France the amounts indicated are very large. A recent estimate would place the cost of construction of sanatoria for 300,000 consumptives at 1,800,000,000 francs, and the annual expense would be 328,000,000 francs. According to the German estimate it would be respectively 200,000,000 and 70,000,000. There is a new law under discussion in the Chamber of Deputies concerning the establishment of a pension for workmen, arrived at a certain age, and the passing of this law might lead to establishing sanatoria as a means of prolonging the time during which a workman can accomplish his work.

Laveran Elected Member of the Institute.

One of the highest honors that a physician can obtain in France is to be made a member of the Academy of Sciences; one may say that the life of a physician is made up of the following positions, which he is destined to occupy in succession: Medical student, externe, then interne of the hospitals, physician of the hospitals, professor agrégé of the Faculty of Medicine, member of the Academy of Medicine, and lastly member of the Institute. A place was vacant on account of the death of Professor Potain and on May 20 an election took place. Dr. Laveran, who is so well known for his works on malaria, got 40 votes and Professor Richet 13.

LONDON LETTER.

The Polyclinic Dinner.

The annual festival dinner of the Medical Graduates' College and Polyclinic has been a most successful function, and by far the most important medico-social event of the year. Mr. A. J. Balfour, M.P., first lord of the treasury, presided, and was supported by many distinguished persons, including the Duke of Marlborough, Lord Kelvin, Sir William Broadbent (president of the Polyclinic), Mr. Jonathan Hutchinson, Sir William Gowers, Sir Lauder Brunton, the Lord Mayor and the Bishop of London. About 400 physicians were present. Mr. Balfour proposed the toast of the Polyclinic in an excellent speech. In describing the need for such an institution and the position of medical science in this country he showed a command of the subject which might be envied by any medical speaker. He pointed out that there were three sides to the activity and utility of the Polyclinic. First it supplies medical advice of the highest kind to persons who could not otherwise obtain it. Vast sections of the population availed themselves of the services of the general practitioner. In cases of difficulty in which he would recommend them to go to some consultant they were not able to do so because they had not the resources. This was a want which was not supplied by the hospitals, but was supplied by the Polyclinic. But this was not the form of its activity which he thought would produce the most far-reaching benefits to mankind. It enabled the hard-worked general practitioner to make himself familiar with the latest researches in medical science—a matter hitherto impossible. It gave these men on the easiest and cheapest terms an opportunity of keeping abreast with the times and coming into personal contact

with the leaders of medical thought. There was yet a third branch of the activity of the Polyclinic—furthering the growth of medical knowledge. Although this country could claim the credit of the discovery of anesthesia and of the antiseptic system it could not be said that, compared with Germany, France, or Italy, it had done all that it might have done as a pioneer of medical discovery. For that the unprofessional and unscientific public were partly to blame. The richest country in the world lagged behind Germany, France and Italy. Mr. Balfour concluded his eloquent speech with a plea for the support of the Polyclinic. The toast was drank with enthusiasm. Sir William Broadbent said, in responding, that the Polyclinic was only the embryo of what it hoped to become in the advancement of medical science and investigation. Mr. Jonathan Hutchinson also responded and referred to the unique collection of photographs and illustrations of disease which were being accumulated at the Polyclinic and would in part supply the place of an hospital in the instruction of its members. The immediate result of the banquet was a subscription list of $8000 in aid of the support of the institution.

The Annual Report of the Local Government Board.

The supplement to the annual report of the Local Government Board has just been issued. It opens with a fitting tribute to the great public services of the late Sir Richard Thorne by whose untimely death the board have lost an administrator of the highest order, and with a like reference to the late Dr. Robert Cory, for many years director of the board's animal vaccine establishment. Mr. Power, whose skill and acumen were conspicuously displayed some years ago by his discovery of the agency of milk in the conveyance of scarlatina and diphtheria, has succeeded Sir Richard Thorne as chief medical officer. From the summary of the departmental work which is given, it is evident that the increase in vaccination which is believed to have followed recent legislation did not commence too soon for the safety of the country. The statistics now given apply only to 1897, in which the amount of default is greater than has ever been recorded. Of 927,518 children born in the year only 62.4 per cent. were returned as successfully vaccinated, 11.2 per cent. as having died unvaccinated, 0.3 per cent. as insusceptible, and 3.4 per cent. as exempted under certificates of "conscientious objection," according to the act of 1898. The demand for glycerinated calf lymph is now continuously increasing.

Intestinal Intoxication from Appendicitis.

At the Royal Medical and Chirurgical Society Dr. Sidney Martin described the case of a man aged 50 whose motions were offensive and never solid. After eight weeks there were pallor, cachexia, emaciation and flabby muscles. There were daily from one to three extremely offensive, liquid motions. No cause could be discovered for the intestinal decomposition. The colon was flushed with boric solution, but the patient continued to lose flesh (11 pounds in 15 days), and his condition became desperate. The right deep inguinal glands were enlarged. At one examination a mass was felt in the right loin, and it was decided to explore the abdomen. The mass was found to be the kidney which the emaciation had made readily palpable. The cecum was thickened and the appendix enlarged and there were calcereous glands between the ileum and cecum. The appendix and glands were removed. The appendix was enormously thickened and its mucous membrane showed two small erosions. The contents were extremely fetid. The appendix was considered the origin of the patient's condition. Gradual recovery followed. Seven months after operation the bowels were loose only occasionally and there was no fetor. The glandular enlargement disappeared rapidly after the operation and might be considered part of the intoxication process. As far as could be discovered there was no bacterial infection. Mr. R. J. Godlee, in commenting on the surgical aspect of the case, said that enlargement of the inguinal glands in association with appendicitis was a new fact in his experience.

The Pathological Society.

Certain alterations in the mode of work of the society have been adopted. In future the work will be carried on in four sections with sectional chairmen and secretaries. Section A (pathological anatomy and histology) will have as chairman Dr. J. F. Payne; Section B (bacteriology), Dr. Klein, F.R.S.; Section C (experimental pathology), Dr. F. W. Pavy, F.R.S.; Section D (chemical pathology), Prof. Halliburton, F.R.S. The members of the council have been arranged in a corresponding manner in committees for the several sections. This alteration in the mode of conducting the business of the society has been necessitated by the great extension of the field of pathology since the society was founded in 1846. It will no doubt greatly conduce to the utility of the society, which has done such excellent work in the past, by keeping together all who are working at the different branches of pathology.

Correspondence.

"A New Operative Method for Exposing the Seminal Vesicles and Prostate for Extirpation."

TOLEDO, OHIO, June 4, 1901.

To the Editor:—In the May 4 issue of THE JOURNAL my attention has been called to an article by Dr. Eugene Fuller, of New York, on the subject of "A New Operative Method for Exposing the Seminal Vesicles and Prostate for Extirpation." Inasmuch as Dr. Fuller's assumptions are based upon work which originated, so far as I have any definite information, with myself more than nine years ago, and was published in the *New York Medical Record*, Aug. 6, 1892, I feel that he has done me an injustice to publish a report of "a new method" wherein he describes an operation exactly like my own, with the unimportant change of the patient from the dorsal to the ventral decubitus. Does changing a patient from the dorsal to the ventral position give an operator the right to lay claim to all the work that has preceded him in that direction? It appears that Dr. Fuller has taken this position. In Dr. Fuller's "new method" his paper is illustrated showing the ventral position of the patient and the line of incision which covers the field external to the anal sphincters and internal to the pelvic rami, the two lines along the rami being connected by a transverse incision immediately in front of the anal sphincters and behind the transversus perinei. Dr. Fuller says of this space, that it gives easy access to the prostate and seminal vesicles and is devoid of necessary hemorrhage, there being no vessels to ligate. In my article in the *New York Medical Record* of Aug. 6, 1892, I use the following words in the description of my operation: "The space immediately in front of the rectum and behind the bulb of the urethra was chosen as the route to reach the base of the bladder and the prostate. The transverse diameter of the outlet of the pelvis at this point is too short to work in, and, consequently, it behooved me to increase the operating space without doing injury to important structures. I accomplished this by making a semicircular incision, as is shown in the illustration, from a point midway between the tuber ischii around the anus and entirely within the connective tissue between the bulb of the urethra and the rectum. The advantage of this is that it gives the widest possible diameter of the pelvic outlet with no hemorrhage to speak of, and an easy access to the field of operation. No spurting vessels need be divided, inasmuch as they lie to the outside and in front of the incision." In the *Philadelphia Medical Journal*, April 1, 1899, I further elaborated the anatomical surroundings, and it would seem impossible for Dr. Fuller not to see that he was pursuing the same description and making the same claims that I had already made. The photographic illustrations which accompanied my articles to the *New York Medical Record* and the *Philadelphia Medical Journal*, with the descriptions therein given, evidences the similarity of Dr. Fuller's operation with that of my own.

Respectfully, JOHN S. PYLE, M.D.

Decinormal, not Normal, Salt Solution in General Use.

PALMER, NEB., June 4, 1901.

To the Editor:—In a recent issue of THE JOURNAL the writer noticed the question as to how much salt to put in a quart of water to make the normal solution extemporaneously. The answer given was to take a small teaspoonful to the pint. This answer is, of course, correct for the purpose intended. However, it makes the decinormal, and not the normal, solution. A normal solution is almost exactly two ounces (avoirdupois) of common salt (NaCl) in a quart of water.

A normal solution contains as many grams of the drug per liter of menstruum as there are units in the molecular weight of the drug taken for univalent substances or substances combining with one atom of hydrogen. For instance: 23 (the combining weight of Na) added to 35.4 (the combining weight of Cl) equals 58.4, the number of grams for a liter of water. This makes 899 grains salt to be put into 33 ounces and 6.5 drams water (liquid measure). This, of course, is too strong even for analytic chemistry, so that only one-tenth of the amount of salt is taken per liter of water.

From this it appears that 90 grains (89.9) is nearly correct for a quart of water, to make even the decinormal solution. It is the decinormal salt solution that is used for intravenous injection or subcutaneous transfusion, and not the normal solution at all.

C. S. MINNICH, M.D.

Surgery in Exophthalmic Goiter.

COLUMBUS, OHIO, May 27, 1901.

In response to the suggestion in the Editorial on the above subject in the issue of THE JOURNAL of May 25, 1901, I report briefly the following case:

Mrs. P., Dennison, Ohio, aged 34, mother of two children, youngest of which is aged 6, was suffering with a retroverted and adherent uterus, with prolapse of the right ovary. She had a well-marked goiter, with a pulse of 132. Exophthalmos was noticeable, but not pronounced. She had been having this condition of the goiter and heart for a year or more, but the symptoms seemed stationary. Operation was made Nov. 20, 1898, in the presence of Drs. S. L. McCurdy of Pittsburg and C. U. Patterson of Uhrichsville, Ohio. The operation consisted in separating the adhesions and making an ordinary ventral suspension. The patient stood the operation well and suffered no ill effects afterward. Her pulse on the second day reached 140, but soon dropped to its usual frequency, and so continued until she left the hospital. I understand that her symptoms of exophthalmic goiter still remain about as they were at the time of her operation. This is my only experience in operating in this disease. In the case referred to in your editorial the connection between the exophthalmic goiter and the fatal issue is, to my mind, by no means clear.

J. F. BALDWIN, M.D.

The Monument to Dr. Ollier.

PHILADELPHIA, June 3, 1901.

To the Editor:—Some time since you kindly published an appeal of a committee soliciting subscriptions for a monument to the late Professor Ollier in Lyons. As treasurer of the committee, I beg to inform the profession that I have received the sum of $649 from 103 subscribers. I have forwarded the same, less $4.60 for postage, printing, etc., to Dr. G. Mondan, 27 rue Jarente, Lyons, France.

Yours very truly,

W. W. KEEN, Chairman.

Professor Freund.—Professor W. A. Freund, of Strassburg, recently resigned his chair to retire from active professional duties. He facetiously observed in his farewell address to the students that the physician nowadays is like the camel in the fable whose back was broken by the proverbial last straw. The profession is the cruel master whose back was broken by the proverbial last straw. The profession is the cruel master that loads him down with a constantly increasing burden of new anatomic, microscopic, chemical and photographic techniques, new methods of diagnosis, new bacteria and toxins, new antitoxins and new methods of sterilizing the hands. The last straw is the wearing of hoods and masks to operate in. "Instead of staggering under this daily growing load until my back breaks," he remarked, "I prefer to be like the horses of the watering carts, who start out with heavy loads, but find their task constantly growing lighter."

Association News.

AMERICAN MEDICAL ASSOCIATION.

Fifty-Second Annual Meeting, held at St. Paul, Minnesota, June 4-7, 1901.

OFFICIAL REPORT OF THE GENERAL SESSIONS.

JUNE 6—THIRD GENERAL SESSION.

The Association met at 11 a. m., and was called to order by the President.

The minutes of the previous General Session were read by the Secretary and approved.

Before proceeding with the regular order of business, the President stated that he had arranged with the Committee of Arrangements to allow 10 minutes for the presentation of a memorial, with remarks by the representatives of the National American Woman's Suffrage Association relative to certain questions of sanitation in the Army.

President Reed then introduced Miss Susan B. Anthony, who spoke briefly on the subject of regulating vice in Manila, Hawaii, and Porto Rico, the new possessions of the United States.

Miss Anthony was followed by the Rev. Anna Shaw, who spoke of the memorial that had been passed at the thirty-third annual convention of the National American Woman's Suffrage Association, held May 30 to June 5, 1901. She outlined the principal features of the memorial, and expressed the hope that some action might be taken by the Association in regard to the regulation of vice in our new possessions.

Dr. Seaman, New York, asked for two minutes of the time of the Association in which to point out the actual condition of affairs in regard to the prevalence and control of vice in China and elsewhere. This time was granted, and Dr. Seaman read extracts from a paper which he had presented before the recent meeting of the military surgeons of the United States.

Dr. McCormack, Kentucky, offered the following resolution as supplementary to the work of the Committee on Reorganization relating to state and county societies:

Resolved, That this Association cordially endorses the plan proposed by the Committee on Reorganization for a uniform system of organization of state and county societies in affiliation with this body; and the Secretary is hereby instructed to correspond with the officers of each state society and urge the adoption of such plan in so far as it may be applicable to their conditions, and that he shall report to the next annual meeting the result of such correspondence.

On motion, the resolution was adopted.

Dr. Gould, Pennsylvania, offered the following resolution:

WHEREAS, at the last meeting of this Association an appropriation of $150 was made to pay the expenses of the Committee on Reorganization, and

WHEREAS, the actual expenses incurred by the members of this Committee in the performance of its duties amounts in the aggregate to nearly $400; therefore, be it

Resolved, That the Board of Trustees be authorized to pay such properly attested bills of expenses, not to exceed the sum of $400 above named.

On motion, the resolution was adopted.

The President announced as the Committee on National Legislation: Drs. H. L. E. Johnson, of Washington, D.C., William L. Rodman, of Philadelphia, and William H. Welch, of Baltimore.

The President said that in the new Constitution and By-Laws the words "Session" and "Meeting" were used in such a manner as to create confusion. After quoting from Robert's Rules of Order the correct use of these terms, he stated that unless the Association ordered otherwise, he would direct the Committee on Engrossing the Constitution and By-Laws to rectify the matter.

There being no objection, it was so ordered.

Dr. Bulkley read the report of the General Executive Committee of June 5, which, on motion, was adopted.

Report of General Executive Committee.

The General Executive Committee begs to reports as follows:

The Committee met yesterday afternoon at 3 o'clock, thirty members being present, in conjunction with the Committee on Reorganization. The Committee remained in session till 6:30 p. m.

As there were many matters in the President's Address requiring careful consideration, no action was taken upon it except to refer it to a sub-committee, who will report to-day and the General Executive Committee will report upon same, after full discussion, to-morrow.

The report of the secretary, which was referred to the Executive Committee, was considered and the recommendations contained therein were adopted for recommendation to the Association.

The representatives of the Section on Physiology and Dietetics and that on Pathology and Bacteriology reported that their Sections had each requested by vote that the two Sections should be combined into one section under the title of Section on Physiology and Pathology, in order that the scientific work relating to these branches might be considered together; they reporting also that the attendance on each Section was so small that it was desirable to consolidate the two. After discussion and inquiring from members of the executive committee of each Section, who were present, the General Executive Committee finally resolved to request the Association that the proposed change or merging of the two Sections into one section be adopted by the Association.

L. DUNCAN BULKLEY, M.D., Secretary.

Dr. Bulkley read the report of the General Executive Committee of June 6 on matters that had been referred to it.

Report of General Executive Committee.

The General Executive Committee begs to report as follows:

1. The President's Address has been carefully considered and the Committee respectfully submits for your consideration the following recommendations made by him with their endorsement:

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

The Committee on the President's address respectfully submit for your consideration the following recommendations:

1. That the admirable address of our President, Charles A. L. Reed, be published in full in an early issue of THE JOURNAL of the Association.

2. That the Association appoint a Committee to draft appropriate resolutions commemorative of the lives and distinguished services of Alfred Stillé, Lewis A. Sayre and Hunter McGuire, recently deceased Presidents of the Association, and that resolutions adopted be published in THE JOURNAL, and engrossed copies of the same be tendered to the nearest living relative, respectively, of these distinguished men.

3. That action be taken to secure suitable portraits of deceased ex-Presidents of the Association.

4. That the incorporation of the Association be confirmed.

5. That a Committee of three be appointed to revise the Code of Ethics with instructions to report at the next annual session of the Association, and that a printed report of their revision be published in THE JOURNAL of the Association not later than April 1, 1902.

6. That the Association pass resolutions of disapproval of the action of Congress in failing to pass the bill which provided for the proper and adequate recognition of the medical corps of the United States army. * * *

2. In regard to the request from the Committee on Scientific Research, signed by Dr. William H. Welch, chairman, the Executive Committee recommends to the Association that the sum of $500 appropriated for this Committee last year and not expended, be used by that Committee this year in place of further appropriation of $500.

3. A communication from Dr. Arthur MacDonald in regard to the establishment of a Psycho-Physical Laboratory in the Department of the Interior at Washington, was received by the Committee and fully discussed. They would recommend that the following resolution be adopted with reference to the same:

Resolved, That we are in favor of the establishment of a Psycho-Physical Laboratory in the Department of the Interior at Washington for the practical application of Physiological Psychology to Sociological and Abnormal Pathological data, especially as found in institutions for the criminal, pauper and defective classes and in hospitals and also as may be observed in schools and other institutions.

4. The report of Committee on Legislation was considered and the following recommendations contained therein are endorsed by your Committee for adoption. (See report.)

5. The Section on Pathology and Physiology having requested the Committee to consider their work, your Committee begs to recommend to the Association that the appropriation of $500 for the Pathologic exhibit be continued for the following year, as your Committee believes this to be an extremely valuable portion of the educational work carried on by this Association.

6. Your Committee begs leave to call attention of the Sections to the necessity of each electing two delegates for the House of Delegates for the coming annual session.

It was moved that the report be adopted as read. Seconded.

Dr. H. Bert Ellis, California, suggested that the name of Dr. R. Beverly Cole, California, be added to the list of deceased presidents, and it was so ordered.

Dr. Happel, Tennessee, said he understood that there was a provision in the report of the Committee on President's Address which involved the appointment of a Committee to revise the Code of Ethics. He did not wish to make a motion to table that part of the report, for the reason it might carry with it the possibility of tabling the entire report. He therefore asked that this section of the report be considered and acted upon separately. Accordingly, he made the following motion:

"I move as an amendment to the motion that the report be adopted as a whole, save and excepting the appointment of a Committee to revise the Code of Ethics, and that this section be left for action until all the other sections are disposed of." Seconded.

Dr. Allen, of New Jersey, moved as an amendment to the amendment, that each section of the report be read and acted upon separately. Seconded.

The original motion as amended was carried.

Dr Bulkley then re-read the report of the General Executive Committee section by section, all of which were adopted, with the exception of Section 5, which relates to the revision of the Code of Ethics.

After the reading of Section 5, namely, "That a Committee of three be appointed to revise the Code of Ethics, with instructions to report at the next annual session of the Association, and that a printed report of their revision be published in THE JOURNAL of the Association not later than April 1, 1902."

Dr. Reynolds, of Kentucky, moved that this section be laid on the table. Seconded.

Dr. Happel, Tennessee, rose to a point of order, and stated that no one had a right to vote on the Sections of this report who was not a delegate. He therefore demanded the call of the roll of delegates.

After some discussion, Dr. Bishop, Pennsylvania, moved that the roll-call be postponed until the next annual session.

The President put this motion, and it was carried amid laughter.

Dr. N. S. Davis, Jr., of Chicago, was then introduced, and delivered the Oration in Medicine. (See p. 1606.)

On motion of Dr. Ellis, California, a vote of thanks was extended to Dr. Davis for his interesting address.

The Secretary read the report of the Nominating Committee. (See THE JOURNAL, p. 1649.)

Dr. Harris, of New York, moved that the report of the Nominating Committee be adopted. Carried.

Dr. Tuckerman, of Ohio, offered an amendment to the By-Laws:

"Section 3. Committee on Legislation. The Committee on Legislation shall consist of three members appointed by the President of the Association for a term of three years. One member shall be a resident of Washington, D.C., one of Baltimore, and one of Philadelphia. It shall be the duty of the Committee to represent before Congress the wishes of this Association regarding any proposed legislation that in any re-

spect bears upon the promotion and preservation of the public health or upon the material or moral welfare of the medical profession. This Committee shall also invite to a conference once a year or oftener if need be, one delegate each from the medical service of the United States army, the United States navy, and the Marine-Hospital Service, one from the Bureau of Animal Industry, and one from each affiliated state or territorial medical society: such conference to meet in Washington to consider questions of medical and sanitary legislation, and to report back to this Association and to the several state and territorial societies." (Referred to the House of Delegates.)

Dr. W. K. Sheddan, Tennessee, offered the following resolution, which was referred to the Board of Trustees.

"*Resolved*, That in view of the long and faithful services of Dr. W. B. Atkinson, as Secretary of the American Medical Association, the Trustees be directed to defray the railroad expenses of Dr. Atkinson, individually, to and from each future meeting of the Association, and that he be released from duty on the Registration Committee."

Proposed emendment to By-Laws, Chapter IX, Section 7, a follows: Strike out the following words of Section 7, Chapter IX, "reprints and transactions of Sections, including its lists of members, its rules of order, its lists of officers, as now published, shall be paid for out of the funds of the Association, and furnished free to members of the Association."

JUNE 7.—FOURTH GENERAL SESSION.

The Association met at 11 a. m., and was called to order by the President.

Before beginning the regular order, the President made the following statement: "Some confusion exists relative to the exact status of the Association under the reorganization. That there may be no misunderstanding upon this important subject, the Chair begs to explain and now rules that:

"1. The reorganization is, in fact, the original organization under and in pursuance of the articles of incorporation which were ratified by the Association for the first time by and in the adoption of the new Constitution.

"2. The new Constitution goes into effect during the present session only so far as applies to the election of delegates by the respective Sections as defined by the new Constitution. All other business is conducted in accordance with the old Constitution.

"3. All standing committees, and all special committees created by the General Meetings of the present session shall report, next year, to the House of Delegates.

"If there are no objections, these rulings of the Chair shall stand as the sense of the Association. As there are no objections, the foregoing rulings are directed to be recorded as the sense of the Association."

The Secretary read the minutes of the previous General Session, which were approved.

Dr. George M. Kober, of Washington, D. C., was introduced and delivered the Oration in State Medicine. (See p. 1617.)

At the close of the Oration, the President extended a vote of thanks to Dr. Kober in behalf of the Association for his splendid address.

The next order was the appointment of delegates to other societies. The President stated that only one name had been handed in, that of Dr. Judson Daland, whom he appointed as a delegate to represent the American Medical Association at the World's Tuberculosis Congress, to be held in London, England, July 22 of this year. He said other names would be added to the list by the Secretary as they were handed in.

Dr. L. Duncan Bulkley then read the report of the General Executive Committee.

Report of General Executive Committee.

The General Executive Committee begs to report that no business was referred to it by the Association, and but one matter was acted upon, namely, the following resolutions presented by the Section on Pathology and Bacteriology, which are recommended to the General Session with the endorsemnt of the General Executive Committee.

The Section on Pathology and Bacteriology of the American Medical Association presents the following resolutions:

WHEREAS, Mr. John D. Rockefeller, of New York, appreciating the great importance and humanitarian utility of pure scientific medical research, has recently donated the sum of $200,000 for the promotion of original investigation, and has placed the control of this sum in the hands of a committee composed of representative medical scientists under the able chairmanship of Professor William H. Welch, of Baltimore; be it

Resolved, That the medical profession, represented by the American Medical Association, desires to express its profound appreciation of this generous gift and of the gratifying fact that the importance and needs of scientific research in medicine are so clearly realized by the donor; also its appreciation of the wise selection of the chairman of the committee having charge of the same. Be it further

Resolved, That the Secretary of the American Medical Association be instructed to transmit a copy of these resolutions to Mr. Rockefeller.

It was moved that the report be adopted. Carried.

The next in order was the report of the Judicial Council, which was read by Dr. F. H. Wiggin, New York, as follows:

Report of Judicial Council.

The Judicial Council met at 5 p. m., in Parlor 4, at the Hotel Ryan, Dr. H. D. Didama, and F. H. Wiggin, both of New York, being present. Dr. Wiggin was appointed acting secretary by the Chairman, Dr. Didama, and the meeting was adjourned till 5 p. m., June 6.

FREDERICK HOLME WIGGIN, Acting Secretary.

The adjourned meeting of the Judicial Council was called to order by the Chairman, and on motion Dr. C. S. Rodman, of Connecticut, was elected Chairman and Dr. F. H. Wiggin, of New York, Secretary for the ensuing year.

The request of the New York State Medical Association that the name of a member, of New York City, be dropped from the roll of members of this Association and the protest of the member against such action were considered, and as it appeared that his name had been dropped from the roll of members of the New York State Medical Association for nonpayment of his dues for the years 1898, 1899 and 1900, his name was ordered to be dropped from the roll of members of the Association in accordance with the By-Laws, until all such arrears of membership have been paid up and he has been reinstated to membership by his local society and the Secretary so notified.

The request of the Jackson County Missouri Medical Society that the name of a member, of Kansas City, Missouri, be dropped from the roll of members of the American Medical Association because he is not a member of a local society in affiliation was granted, and his name was ordered stricken from the roll of members.

The secretary was also ordered to drop from the roll of members the name of a member of Elkhart, Ind., as he has ceased to be a member of his local affiliated society. The Council having decided that a member of this Association forfeits his membership when he ceases to be a member of a local affiliated society either county or state where one exists.

The Secretary of the Association, having called the attention of the Council to the fact that there are at the present time on the roll of members of the Association, the names of men who, having obtained their membership from an affiliated association, have removed their residence to another county or state and have not joined the local affiliated society in the place of their new residence. The Secretary was ordered to inform such gentlemen that they were acting in violation of the By-Laws of this Association relating to membership, and that he request them to at once obtain membership in an affiliated society in the place of their legal residence and in default of this within a reasonable time, to drop their names from the roll of members.

The Secretary having asked for an interpretation by the Council of the following sentence in the By-Laws relating to membership, to-wit: "Nor shall any person not a member of a local medical society." It was decided that this clause be con-

sidered to mean a local affiliated society in the county or state in which the applicant resides.

The Council, while wishing the full details of this report entered in the minute book, suggests that in publishing it in THE JOURNAL that the names of the individuals mentioned in it be omitted.

FREDERICK HOLME WIGGIN, Secretary.

Report of Committee on National Legislation.

Your Committee on National Legislation, to whom was referred the following resolutions from the National Association of Military Surgeons, presented to your honorable body by Major Louis L. Seaman, U. S. V.:

"*Resolved*, That this body deplores the action of Congress in abolishing the Army Post Exchange or Canteen, and, in the interests of discipline, morality and sanitation, recommends its re-establishment at the earliest possible date."

We have carefully considered the resolution proposed and declare it to be wise and proper, and of importance to every citizen of this republic.

The resolution is the outgrowth of careful study and observation by the medical department of the United States Army, is concurred in by the commanding officers at the several posts, and is intended to correct serious abuses under the present law, which result in drunkenness, desertion, insubordination, dishonorable discharge, crime, poverty, appalling increase in venereal disease and invalidism among the soldiers of the United States Army.

We find that the experience of foreign governments coincides with that of the National Association of Military Surgeons in the necessity for the Army Post Exchange or Canteen.

We recommend that the American Medical Association adopt the resolution proposed and that you petition the Congress of the United States to repeal, at the earliest moment, the objectionable law which prohibits the Army Post Exchange.

Respectfully submitted.

H. L. E. JOHNSON,
Chairman Committee on National Legislation.
WM. L. RODMAN.

On motion of Dr. Lewis, Chicago, the report was adopted.

The President appointed Drs. McGruder and Marcy to escort the President-elect to the platform.

Dr. Wyeth, the newly elected President, was then introduced, and made a brief speech in which he thanked the Association for the distinguished honor conferred upon him.

Dr. Seaman, New York, moved that a vote of thanks be extended to the retiring officers for the admirable, excellent and satisfactory Meeting; also to the Chairman and members of the Committee on Arrangements and the citizens of St. Paul who had done so much to entertain the Association.

Dr. Marcy, Boston, put the motion, and it was carried unanimously by a rising vote.

There being no further business to come before the General Session, Dr. Reed declared the Association adjourned *sine die*.

OFFICIAL MINUTES OF THE SECTIONS.

Section on Practice of Medicine.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The regular work of the Section on Practice of Medicine commenced with the Address of the Chairman, Dr. J. M. Anders, of Philadelphia. Dr. John B. Deaver, of Philadelphia, read a paper on "Appendicitis: Pathological Anatomy, Diagnosis and Treatment." It was discussed by Drs. De Lancey Rochester, of Buffalo; J. B. Kelly, of Philadelphia; Frank D. Smythe, of Memphis; J. A. Witherspoon, of Nashville; Boardman Reed, of Philadelphia; I. N. Love, of New York City; William Bailey, of Louisville; C. W. Lilly, of East St. Louis, Ill.; H. S. McConnell, of Mechanicsburg, Pa.; Frank Warner, of Columbus; A. F. House, of Cleveland; C. A. Kelsey, of Indianapolis; W. Finlay, of Altoona, Pa.; George F. Jenkins, of Keokuk, Iowa; J. M. Spellman, of Anaconda, Mont.; W. H. Christie, of Omaha; Jno. A. Boager, of Philadelphia; and E. L. Herriot, of Jacksonville, Ill.

A paper on "Some Phases of Malaria" was read by J. B. McElroy, of Stovall, Miss. It was discussed by Drs. E. H. Martin, of Clarksdale, Miss.; Wm. Britt Burns and D. M. Hall, of Memphis; De Lancey Rochester, of Buffalo; W. G. Harrison, of Talladega, Ala.; Victor C. Vaughan, of Ann Arbor; G. W. Young, of Breckenridge, Mo.; Louis Schwab, of Cincinnati; Joseph Brayshaw, of Illinois; T. B. Fütcher, of Baltimore, and A. D. Hains, of Cincinnati.

WEDNESDAY, JUNE 5—MORNING SESSION.

"The Chemical and Microscopic Value of Blood Examinations" was read by W. D. Kelly, of St. Paul; "Pernicious Anemia: Report of a Series of Cases," by Thomas McCrae, of Baltimore; and "The Leucocyte Count in Hemorrhage," by George Douglas Head, of Minneapolis. These three papers were discussed by Drs. De Lancey Rochester, of Buffalo; W. B. La Force, of Ottumwa, Iowa; Thomas McCrae, of Baltimore; George Douglas Head, of Minneapolis; W. T. Higgins, of Courtland, N. Y.; A. J. Coy, of Chicago; W. D. Kelly (closing discussion); Thomas McCrae (closing discussion); and George Douglas Head (closing).

"Osmotic Pressure and its Relation to Euremic Manifestations" was read by Heinrich Stern, of New York City.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

The Chairman announced the Nominating Committee as follows: J. B. Herrick, of Chicago, chairman; C. H. Hunter, of Mississippi; and James J. Walsh, of New York City. This committee reported for chairman, Frank A. Jones, of Memphis; for secretary, Robert B. Preble, of Chicago.

A paper on "Cirrhosis with Pigmentation" was read by T. B. Fütcher, of Baltimore; on "Circulatory Disturbances Accompanying Cirrhosis with Inosculation of the Portal Branches with Systemic Veins," by Charles G. Stockton, of Buffalo; on "Cirrhoses of the Liver, Due to Metallic Poisons," by Victor C. Vaughan, of Ann Arbor; on "Treatment of Cirrhoses of the Liver," by J. H. Musser, of Philadelphia. These papers were discussed by Drs. Frank Billings, of Chicago; J. B. Herrick, of Chicago; W. E. Quine, of Chicago; William Bailey, of Louisville, Ky.; O. T. Osborne, of New Haven, Conn.; Robert B. Preble, of Chicago; G. W. McCaskey, of Fort Wayne, Ind.; Clarke Gapen, of Madison, Wis.; G. W. Webster, of Chicago; W. H. Neilsen, of Milwaukee; C. G. Stockton (closing); T. B. Fütcher (closing); and V. C. Vaughan (closing).

A paper on "Rheumatic Stimulants" was read by James J. Walsh, of New York City, and discussed by Charles G. Stockton, of Buffalo; G. W. Webster, of Chicago; C. H. Hunter, of Minneapolis.

Charles Lyman Greene, of St. Paul, read "Akromegaly: Presenting Features of Interest."

THURSDAY, JUNE 6—MORNING SESSION.

The morning work was opened by a paper on "Modified Treatment of Typhoid Fever," by T. B. Greenley, of Meadow Lawn, Ky.; and on "Medical Shock," by O. T. Osborne, of New Haven, Conn. Discussed by Drs. W. C. Lillie, of East St. Louis, Ill.; James J. Walsh, of New York City; C. A. Kelsey, of Minneapolis; Geo. W. Webster, of Chicago; R. C. Newton, of Monclair, N. J.; and O. T. Osborne (closing).

"The Spread of Tuberculosis by Coughing," was read by E. Napoleon Boston, of Philadelphia; "Practical Value of Cultures from the Throat," by H. M. Fussell, of Philadelphia (Read by Dr. G. W. Webster). These papers were discussed by Drs. De Lancey Rochester, of Buffalo; R. C. Newton, of Montclair, N. J.; C. W. Lillie, of East St. Louis, Ill.

"Genito-Urinary Examinations by the General Practitioner: With Demonstrations on Patient," Ferd C. Valentine, of New York City.

THURSDAY, JUNE 6—AFTERNOON SESSION.

The afternoon's work opened with an interesting Symposium on Pericarditis, consisting of papers on "Clinical Observations in Pericarditis," by Frank Billings, of Chicago; "Pathology and Pathogenesis of Pericarditis," by Joseph McFarland, of Philadelphia; "The General Etiology of Pericarditis," by Robert B. Preble, of Chicago; "Relation of Pericarditis to Endocarditis and Myocarditis," by Alfred Stengel, of Philadelphia; "Adherent Pericardium," by Robert H. Babcock, of Chicago; "Tuberculous Pericarditis," by C. F. McGahan, of Aiken, S. C.; "Cardiac Lesions as Observed in the Negro: With Special Reference to Pericarditis," by Frank A. Jones, Memphis; "Some Points in the Treatment of Pericarditis," by Frank Parsons Norbury, of Jacksonville, Ill. They were discussed by Drs. De Lancey Rochester, of Buffalo; James J. Walsh, of New York City; H. B. Sears, of Beaver Dam, Wis.; J. B. Herrick, of Chicago; Carl Beck, of New York City; J. D. Smythe, of Greenville, Miss.; and R. B. Preble, of Chicago.

A paper on "Some Points in Raynaud's Disease," by Carl Beck, of New York City, was discussed by Dr. Charles G. Stockton, of Buffalo.

As delegates to the House of Delegates, the Chairman appointed J. M. Anders, of Philadelphia, and Norman Bridges, of Los Angeles, Cal.

The following resolution was handed the Chairman of the Section for action, by J. A. McKenna:

Resolved, That Section 1, Chapter IX (By-Laws) be changed to read, instead of "Section on Practice of Medicine," to the "Section on Practice of Medicine, Dietetics and Therapeutics," for the reason that therapeutics and dietetics are so closely allied to the practice of medicine that their consideration should be taken up in this Section, and

Resolved, That the Sections from which the subjects of dietetics and therapeutics are subtracted be rearranged by the House of Delegates.

Referred to the Executive Committee for action.

FRIDAY, JUNE 7.

This session was a joint session with Section on Hygiene and Sanitary Sciences.

The Symposium on Smallpox consisted of papers on "A Further Report on Pseudo or Modified Smallpox," by T. J. Happel, of Trenton, Tenn.; "Smallpox: The Old and New," by W. L. Beebe, of St. Cloud, Minn.; "Remarks Covering the Sanitary Features of Smallpox," by Louis LeRoy, of Nashville, Tenn.; "The Diagnosis of Mild Smallpox as in the Present Outbreak of the Smallpox in This Country," by Heman Spalding, of Chicago; "The Distinguishing Characteristics Between Mild Discrete Smallpox and Chickenpox," by Frederick Leavitt, of St. Paul; and "Smallpox," by H. M. Bracken, of St. Paul. They were discussed by Drs. William Bailey, of Louisville, Ky.; James J. Walsh, of New York City; Louis LeRoy, of Nashville, Tenn.; Thos. Wm. Corlett, of Cleveland; F. S. Raymond, of Memphis; J. F. Marchand, of Canton, Ohio; D. B. Pritchard, of Winona, Minn.; J. M. Barr, of McKees Rock, Pa.; E. H. Martin, of Clarksville, Tenn.; G. W. Goin, of Breckenridge, Mo.; C. F. Dwight, of Minneapolis; T. J. Happel (closing); H. Spalding (closing); F. Leavitt (closing); and H. M. Bracken (closing).

The following resolution was presented by Dr. Henry D. Holton, of Brattleboro, Vermont:

Resolved, By the Joint Sections on Practice of Medicine, and Hygiene and Sanitary Science, That the disease now prevailing extensively in the United States and called in some instances, "Pseudo-smallpox" is genuine smallpox and should be so treated with vaccination and quarantine by all health authorities. Carried.

The Section then adjourned.

Section on Surgery and Anatomy.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The meeting was called to order by Dr. A. J. Ochsner, the chairman.

The following papers were read: "Remarks on the Surgery of the Spinal Cord, with Illustrative Cases," by Dr. Andrew J. McCosh, New York City; "Spina Bifida, with Report of an Interesting Case," by Dr. Paul F. Eve, Nashville; "The Methodical Exploration of the Brain for Fluid," by Dr. Christian Fenger, Chicago; "The Immediate and Remote Effects of Brain Injury," by Dr. D. S. Fairchild, Clinton, Iowa. This Symposium of papers was discussed by Drs. W. W. Keen, Philadelphia; Angus McLean, Detroit; Frazier's remarks (contribution) on tri-facial neuralgia; Weir, Frank, Chicago; Earles, Milwaukee; Moore, Minneapolis; Dawbarn, New York City; Bernays; Maxwell, Keokuk; Means, Columbus; Crile, Cleveland; Taggart, Chicago; McKnight, Connecticut; Baldwin, Salt Lake; and Vaughan, St. Louis.

WEDNESDAY, JUNE 5—MORNING SESSION.

The meeting was called to order and the following papers read: "The Mortality of Appendicitis," by Dr. John B. Deaver, Philadelphia; "Some Unusual Features of Appendicitis and their Treatment," by Dr. Ernest Laplace, Philadelphia: "The Knot within the Lumen in Intestinal Surgery," by Dr. F. Gregory Connell, Chicago; "Surgery of the Colon," by Dr. H. O. Walker, Detroit. Discussion was by Drs. Steele, Chicago; Murphy, Chicago; Knight, Connecticut; Maxwell, Iowa; Andrews, Chicago; Harris, Chicago; Moore, Minneapolis; Morris, New York City; Smythe, Memphis.

Dr. Jackson concluded the morning session by giving a paper on "The Teaching of Relational Anatomy," with presentation of specimens.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

The meeting opened with the reading of "The Nature of the Cancerous Process," by Dr. Roswell Park, Buffalo; "The Present Status of the Carcinoma Question," by Dr. Nicholas Senn, Chicago; "Early Diagnosis of Carcinoma—Methods," by Dr. Charles A. Powers, Denver; "The Pathology of Breast Cancer and its Relation to Early Diagnosis and Treatment," by Dr. William S. Halsted and Dr. J. C. Bloodgood; "Carcinoma of the Cecum," by Dr. William J. Mayo, Rochester, Minn.; "Improved Method of Resecting High Rectal Carcinoma," by Dr. Robert F. Weir, New York City; "Method of Operating on Carcinoma of Tongue," by Dr. J. Collins Warren, Boston; "Treatment of Malignant Disease," by Dr. Frederic S. Dennis, New York. This symposium was discussed by Drs. Bernays, St. Louis; Crile, Cleveland; Rodman, Philadelphia; Fuetterer, Chicago; Massey, Philadelphia; Dawbarn, New York City, Levings, Milwaukee; and McKenzie, Oregon.

The Executive Committee reported, through Dr. Rodman, the names of Dr. De Forest Willard, of Philadelphia, for chairman, and Dr. James B. Bullitt, of Louisville, for secretary. Upon vote the nominations were carried.

Dr. Ferguson moved that the same committee consider names of members for election to the House of Delegates, and report tomorrow at 2 o'clock p. m.

THURSDAY, JUNE 6—MORNING SESSION.

The meeting was called to order and the following papers read: "Hemostasis in Amputation at the Hip-Joint, a Résumé of 262 Cases by the Author's Method," by Dr. John A. Wyeth, New York City; "Autoplastic Suture in Hernia and other Ventral Wounds," by Dr. L. L. McArthur, Chicago; "A New Method of Skiagraphic Diagnosis for Renal and Ureteral Surgery," by Dr. L. E. Schmidt and G. Kolischer, Chicago; "Prostatotomy versus Prostatectomy for Prostatic Hypertrophy," by Dr. Ramon Guiteras, New York City; "Prostatectomy, the Method of Choice in the Management of Prostatic Obstruction," by Dr. Eugene Fuller, New York City; "A Further Report on Permanent Catheterization," by Dr. J. R. Eastman, Indianapolis; "Fallacies in the Treatment of Urethral Diseases," by Dr. Robert Holmes Greene, New York City; "Perineal Prostatectomy," by Dr. Parker Syms.

THURSDAY, JUNE 6—AFTERNOON SESSION.

This meeting consisted in the reading of papers in a symposium on the Surgery of the Chest: "Pneumectomy and Pneumotomy," by Dr. J. B. Murphy, Chicago; "Insufflation of the Lungs and its Application to Pulmonary Surgery," by Dr. Rudolph Matas, New Orleans; "Removal of Foreign Bodies from the Trachea and Bronchi," by Dr. De Forest Willard, Philadelphia; "Treatment of Empyema," by Dr. James H. Dunn, Minneapolis. These papers were discussed by Drs. Means, Columbus; Henry, Omaha; Walker, Detroit; Sylvester, Wallston, Ohio; Wright, Bridgeport, Conn.; Powers, Denver; Eisendrath, Chicago; Eastman, Indianapolis; G. F. Shimonek, Milwaukee; McArthur, Chicago; Dawbarn, New York City; Rockey; Warner, Columbus; Andrews, Chicago; McGowan, Los Angeles; Allaben, Rockford, Ill.; Guiteras, New York City; Syms, New York City; Greene, Litchfield, Ky.; Bernays, St. Louis; Barber, San Francisco; Jepson, Sioux City, Iowa; Frank, Chicago; Wills, Los Angeles; Norred, Minnesota; Means, Columbus; Willard, Philadelphia; Dunn, Minneapolis.

FRIDAY, JUNE 7—MORNING AND FINAL SESSION.

The meeting was called to order and proceeded to the reading of the following papers: "Acute Infective Cholangitis and Cholecystitis as a Complication of Gall-stones," by Dr. Daniel N. Eisendrath, Chicago; "Dissecting Abscesses of Abdominal Wall Producing Symptoms Simulating Pott's Disease of the Spine," by Dr. James Bullitt, Louisville.

These papers were discussed by Drs. Smythe, Memphis; McGowan, Thomas, Pittsburg; Crane, Vermont; Means, Columbus; Davis, Omaha; Rodman, Philadelphia; Lemon, Milwaukee; Bloodgood, Baltimore; Porter, Fort Wayne; Phillips, Rocky Ford; Mitchell, Missouri; Maxwell, Iowa; Bernays, St. Louis; Leonard, Philadelphia; Eisendrath, Chicago; Bullitt, Louisville; Grant, Denver.

"Fractures of Femoral Neck" was read by Dr. Ruth, of Iowa, with exhibition of patient; discussed by Drs. Thompson, of Scranton, and Liston Montgomery, of Chicago.

Dr. Pennington gave a blackboard demonstration and paper entitled, "A Simple Operation for the Treatment of Hemorrhoids."

Section on Obstetrics and Diseases of Women.

TUESDAY, JUNE 4—AFTERNOON SESSION.

The Section was called to order at 2 p. m. by the Chairman, Dr. H. P. Newman, at the Masonic Hall. Dr. Edwin Ricketts read the report of the Committee on Reorganization, which on motion of Dr. Henry, of Omaha, was adopted and the Committee continued to carry out the details suggested.

Here Dr. Ricketts took the chair, while the Chairman, Dr. H. P. Newman, delivered his Address. On motion, this address was referred to the Committee on Publication.

Dr. A. H. Cordier, Kansas City, read a paper entitled "Post Operative Intra-Peritoneal Hemorrhage." This was discussed by Drs. L. S. McMurtry, Howard Kelly, Seth Gordon, H. O. Marcy, F. H. Wiggin, C. C. Frederick, M. L. Harris, G. B. Massey and, in closing, by Dr. Cordier.

Dr. J. G. Clark, Philadelphia, read a paper entitled "Contributing Factors in the Production of Peritonitis." It was discussed by Drs. Wiggin, Humiston, Kelly, Baldy, Carstens, Wathen, Deaver, Bovée, Henry, Kolischer, Watkins, Dudley, Andr, Smith, Ries, and, in closing, by Dr. Clark.

The next paper was read, by invitation, by Dr. M. D. Mann, Buffalo, on "A New Operation for Extirpation of Cancer of the Rectum." It was discussed by Drs. Marcy, Bovée, and, in closing, by Dr. Mann.

Dr. John Deaver read a paper entitled "The Accidents and Complications of Pelvic Surgery and Their Treatment." It was discussed by Drs. Carey, Harris, Frank Warner, Ricketts, Henry, Smith, Steele, Watkins, Rosenthal and, in closing, by Dr. Deaver.

The Chair appointed the following Nominating Committee: A. H. Cordier, W. E. B. Davis, L. S. McMurtry, S. Gordon, C. C. Frederick. Committee on Reorganization: Bovée, Ricketts and Henry.

WEDNESDAY, JUNE 5—MORNING SESSION.

Meeting was called to order at 9 a. m. by the President.

Dr. O. Theinhaus, Milwaukee, read a paper entitled "Atresia Hymenalis," and exhibited pathologic specimen. Discussed by Drs. McDiarmid and Goldspohn.

"Results, Immediate and Remote, of Conservative Surgery" was the title of a paper read by Dr. A. Goldspohn, Chicago. It was discussed by Drs. Bovée, Jos. Eastman, Cohn, Specht, Henry, and, in closing, by Dr. Goldspohn.

Dr. A. J. Downes, Philadelphia, read a paper entitled "Electrothermic Hemostasis in Abdominal and Pelvic Surgery." It was discussed by Drs. F. H. Martin, Massey, Ries, Eastman, Newman, Bovée, and, in closing, by Dr. Downes.

WEDNESDAY, JUNE 5—AFTERNOON SESSION.

The meeting was called to order at 2 p. m.

First paper was read by Dr. E. E. Montgomery, Philadelphia, "How Shall We Deal with Uterine Myomata?" It was discussed by Drs. Eastman, Gordon, Wathen, Palmer Dudley, Massey, and, in closing, by Dr. Montgomery.

"Carcinoma of the Uterine Neck" was read by Dr. J. M. Baldy, and discussed by Drs. Carstens, Clark, Zinke, Ries, Montgomery, Kolischer, Massey, Bovée, Wiggin, Duff, and Baldy in closing.

"The Relative Merits of the Different Methods of Uretero-ureteral Anastomosis" was read by Dr. J. Wesley Bovée, Washington. "Some Results of Ovarian Surgery with Further Report upon Intra-uterine Implantation of Ovarian Tissue" was read by Dr. A. Palmer Dudley, New York City. Discussed by Drs. Goldspohn, Goffe, Humiston, and Dudley in closing.

"The Various Incisions Appropriate to Different Renal Operations" was read by Dr. H. A. Kelly.

THURSDAY, JUNE 6—MORNING SESSION.

The meeting was called to order at 9 a. m.

Dr. E. Ries read a paper entitled "A New Operation for Retrodisplacement of Uterus."

Dr. F. H. Martin, Chicago: "Surgical Treatment of Retroversion of Uterus." Discussed by Drs. Goffe, Gordon, Goldspohn, Kelly, McDiarmid, Ries and Martin.

Nominating Committee reported: Chairman, J. H. Carstens, Detroit; secretary, C. L. Bonifield, Cincinnati.

THURSDAY, JUNE 6—AFTERNOON SESSION.

The meeting was called to order at 2 p. m. by Dr. H. O. Marcy.

The Committee on Reorganization reported, which, on motion of Dr. Humiston, was unanimously adopted.

It was moved that the secretaryship of the Section be made permanent. Carried.

The number of papers in this Section hereafter will be limited to thirty-six, fifteen minutes being allotted for the reading of each paper. The Chairman called attention to the importance of members furnishing abstracts of their papers, to be published in the official program. At future meetings of this Section the Chairman will arrange for two men to open the discussion on papers.

The following papers were read: "The Practice of Obstetrics as It Is and as It Should Be," by Dr. E. G. Zinke, Cincinnati; "Position of Patient During Delivery," by Dr. W. D. Porter, Cincinnati; "Puerperal Sepsis," by Dr. J. F. Moran, Washington; "Indications and Contra-indications for the Use of Curette in Obstetric Practice," by Dr. H. D. Fry, Washington; "A Case of Streptococcus Infection Following Labor, Operation, Recovery," by Dr. W. H. Humiston, Cleveland. Discussed by Drs. Harris, M. F. Porter, Case, Henry, Ricketts, Dannaker, Bovée, Specht, and, in closing, by W. D. Porter and J. F. Moran.

"The Increasing Sterility of American Women" was read by Dr. G. J. Engelmann, and discussed by Drs. Duff, Wathen, MacDiarmid, Ferguson of New York, M. F. Porter, Jack, H. W. Graham, Coy of Duluth, and, in closing, by Dr. Engelmann.

Dr. C. Dannaker moved that the American Medical Association communicate with the proper United States authorities that it is the desire of this society that in the future compilation of the United States census that the fecundity of the American family be taken into consideration, the nativity of father and mother being made a matter of record and the number of children born. Carried unanimously.

On motion, a committee was appointed to bring the matter before the proper authority: Drs. G. J. Engelmann, Ferguson of New York, and C. L. Bonifield.

"Ectopic Gestation" was read by Dr. W. H. Wathen; and discussed by Drs. Goldspohn and Wathen.

Dr. L. S. McMurtry, Louisville, and Dr. W. H. Humiston, Cleveland, were elected members of the House of Delegates.

FRIDAY, JUNE 7—MORNING SESSION.

The meeting was called to order at 9 a. m. by the Chairman.

Dr. T. J. Beattie, of Kansas City, Mo., read a paper entitled "Puerperal Eclampsia; its Etiology and Treatment." It was discussed by Drs. Bonifield, Cates, Plummer, Rosenthal, Hall, and Beattie in closing.

"Cesarean Section as a Method of Treatment of Placenta Previa" was read by Dr. W. J. Gillette, of Toledo, and discussed by Drs. Eastman, Bernays, Henry, Engelmann, Dugan, Oyler, Bonifield, Reese, Newman and the essayist.

"Intra-uterine Amputations" was read by Dr. J. Maher; "Gynecology; its Contributions to Surgery," by Dr. H. O. Marcy.

Adjourned *sine die*.

New Members.

The following is a list of new members for May:

ARKANSAS.

Young, J. M., Little Rock.
Stover, Arthur Reece, Little Rock.
Cann, Dewell, Benton.

CALIFORNIA.

Purdon, J. E., Turlock.
Fenyes, Adalbert, Pasadena.
Jones, W. Harriman, St. Helena.
Stephens, Wm. Bradley, San Francisco.
Werner, A. F., San Francisco.
Newkirk, Garrett, Los Angeles.
Magee, Thos. L., San Diego.
Baird, J. Gordon, Riverside.
Visscher, L. G., Los Angeles.
Outwater, Sam'l, Riverside.
Ball, Chas. A., Santa Ana.

COLORADO.

Clark, Jas. L., Denver.

CONNECTICUT.

Flint, Eli P., Rockville.
Parmele, Geo. L., Hartford.
McKnight, Everett J., Hartford.

DELAWARE.

Winner, William G., Wilmington.

ILLINOIS.

Rose, Frank L., Chicago.
Butzoe, Arthur M., Chicago.
Lieberthal, David, Chicago.
Anthony, Henry G., Chicago.
May, S. R., Mt. Zion.
Kerr, Norman, Chicago.
Carr, Edgar D., Argenta.
Parrish, M. P., Decatur.
Curry, Thos. Walter, Streator.
Sullivan, E. A., Amboy.
O'Malley, Thos. Jas., Joliet.
Suker, Geo. F., Chicago.
Wesener, Jno. Alfonso, Chicago.
Harrison, Wallace K., Chicago.
St. John, Leonard, Chicago.
Dodson, John Milton, Chicago.
Earle, C. A., Desplaines.
Patton, Jos. M., Chicago.
Kolischer, G., Chicago.
Goodkind, Maurice L., Chicago.
Livingston, W. R., Maywood.
Brode, Willard D., Chicago.
Montgomery, A. B., Reynolds.
Allport, H. W., Chicago.
Adams, Nathaniel H., Chicago.
Huston, Irwin E., Roanoke.
Wilcox, J. M., Clinton.
Kurtz, Russell L., Neoga.
Vick, John W., Carterville.

INDIANA.

Cunningham, Wm. Ralph, Bourbon.
Long, C. R., Pierceton.

IOWA.

Richardson, Leon F., Terril.
Michel, Bernard, Dubuque.
Miller, Frank W., Red Oak.
Brown, Luther, Rockford.
Schultz, Chas. S., Lake Park.
Grimes, Eli, Des Moines.
Brooks, J. M., Newell.
Slattery, Wm. P., Dubuque.
Reynolds, Jno. W., Creston.
Niemack, Julius, Charles City.
Birney, Varilles C., Greene.
Fraser, Jefferson E., Garner.
Brackett, A. R., Charles City.
Berner, W. F., Merrill.
Christy, Wm. D., Shannon City.
O'Keefe, J. E., Waterloo.
Schilling, N., New Hampton.
Dorr, E. E., Des Moines.
Sanders, Chas. Willard, Manley.
Vesterborg, Peder H., Forest City.
Merrill, N., Marshalltown.
Flynn, Chas. H., Postville.
Keogh, John V., Dubuque.
Powers, F. W., Reinbeck.
De Armand, J. A., Davenport.
Bay, Edgar L., Eddyville.
Young, J., Bonaparte.
Brownson, J. J., Dubuque.
Christensen, F. A., Lake Mills.

KANSAS.

Sheridan, Allen V., Paola.
Gardner, M. N., Greenleaf.
Tracy, Frank M., Kansas City.
Clarke, H. L., Lacygne.
Carpenter, Chas. R., Leavenworth.
Saunders, Nathan J., Cawker City.
Bogle, Herman H., Pittsburg.
Stryker, Isaac E., Baxter Springs.
Hutton, Alfred, Lincoln.

KENTUCKY.

Pleck, Chas. G., Covington.

LOUISIANA.

Reeves, Marcus Clifford, Vidalia.

MAINE.

Ward, Parker M., Houlton.
Marshall, N. M., Portland.

MARYLAND.

Medders, Chas. H., Baltimore.
Henry, Wm. T., Fishing Creek.

MASSACHUSETTS.

Beals, Arthur L., Brockton.
Beckley, Chester Chas., Lancaster.
Foskett, Geo. M., Worcester.
Hartung, Harry Hall, Boston.
Harmon, Melvin A., Lynn.
Cabot, Arthur Tracy, Boston.

MICHIGAN.

McGugan, Arthur, Kalamazoo.
Broisacher, Leo., Detroit.
Morse, H. Beach, Elk Rapids.
Lewis, C. H., Jackson.
Greenmayer, John D., Niles.
White, Jas. G., Mt. Clemens.
Rowe, Wm. E., Allegan.
Jones, John R., Detroit.
Gardiner, S. E., Mt. Pleasant.

MINNESOTA.

Brimhall, John B., St. Paul.
Schwyzor, Gustav, St. Cloud.
Hvoslef, Jacob, Minneapolis.
Geer, Ethelbert F., St. Paul.
Murray, Wm. R., Minneapolis.
Wells, Ernest Eldred, Barnum.
Soper, John Elford, Norwood.
Daniel, Orianna M., Minneapolis.
Tibbetts, J. I., Wayzata.
Whitney, A. W., St. Paul.
Crafts, Leo M., Minneapolis.
Taylor, Wm. J., Pipestone.
Leavitt, Frederick, St. Paul.
Xanlen, Frank A., St. Paul.
O'Brien, H. J., St. Paul.
Christison, J. T., St. Paul.
Keyes, Chas. R., Duluth.
Bayley, Emery H., Lake City.
Bohland-Fuchs, T. J., Belle Plain.
Day, Lester W., Minneapolis.
Christie, G. R., Long Prairie.
Estabrook, Edw. L., Minneapolis.
Portmann, Wm. C., Jackson.
Daniels, Jared W., St. Peter.
Chapman, W. E., Litchfield.
Cavanaugh, J. O., St. Paul.
Benepe, Louis M., St. Paul.
Senkler, Geo. E., St. Paul.
Kilvington, S. S., Minneapolis.
Kohler, Christian H., Minneapolis.
Graham, Benj. F., Minneapolis.
Lee, Thos. G., Minneapolis.
Davis, Jas. P., Kellogg.
Scoboria, C. Q., Elm River.
McDonald, Hugh N., Minneapolis.
Kenyon, Paul, Wadena.
Von Berg, J. P., Albert Lea.
Stevenson, Geo. A., Albert Lea.
Friedlander, Sam'l, Minneapolis.
Newhart, Horace, Minneapolis.
Andrist, J. Walter, Ellendale.
Kistler, Arthur S., St. Paul.
Aborn, W. H., Hawley.
Knudsen, Becker Chr., Tyler.
Macdonald, A., St. Paul.
Richardson, Walter J., Fairmont.
Fischer, Otto Ferdinand, Houston.
Stratheen, Fred P., St. Peter.
Lynn, Jas. F., Waseca.
Dredge, Homer Percy, Belview.
Williams, A. Elton, Minneapolis.
Schlueter, Robt. E., St. Paul.
Wilson, Louis Blanchard, Minneapolis.
Robertson, Jas. W., Litchfield.
Denny, Chas. F., St. Paul.
Simon, B. F., St. Paul.
Baker, J. F., St. Paul.
Erdmann, Chas. A., Minneapolis.
Cates, A. B., Minneapolis.
Knight, Fred'k A., Minneapolis.
McLaren, Jennette M., St. Paul.
Binder, Geo. A., St. Paul.
Austin, Mabel H., St. Paul.
Brown, LeRoy, St. Paul.
Henderson, Andrew, St. Paul.
Ritchie, Harvey P., St. Paul.
Lando, David H., St. Paul.
Shelby, E. C., St. Paul.
Stein, Gottlieb, St. Paul.
Kilbourne, Arthur Foot, Rochester.
Colvin, Alexander R., St. Paul.
Stamm, Gottfried, St. Paul.

MISSOURI.

Mills, O. P. M., Grant City.
Brook, Hyman, St. Louis.
Fry, Frank R., St. Louis.
Bernays, Augustus C., St. Louis.
Wolfe, Benj. F., Carthage.
Peak, Oscar L., Springfield.

MISSISSIPPI.

Elmore, R. C., Black Hawk.
Mitchell, A. T., Vicksburg.
Kiger, W. G., Brunswick.
Trotter, Clifford H., Winona.

NEBRASKA.

Kearns, A. J., Loup City.
Berry, Wm., South Omaha.
Stevens, Jas. Franklin, Lincoln.
Vance, Jno. H., Omaha.
Ziegler, Chas. H., Vesta.
Meredith, G. A., Crawford.
Foote, J. S., Omaha.

NEW YORK.

Nagel, Jos. D., New York City.
Congdon, W. O., Cuba.
Mewborn, Ala Duke, New York City.
Bentz, Henry G., Buffalo.
Moore, B. S., Syracuse.
Bluestone, Jos. I., New York City.
Walker, LeRoy P., New York City.
Traub, Jno. Emil, New York City.
Smith, Jos. James, New York City.
Kerrigan, Jos. A., New York City.
Musgrave, Christopher J., New York City.
Barber, Annetta E., Glen Falls.

NEW JERSEY.

Wallace, Dana L., Newark.

NORTH DAKOTA.

Clark Sidney, B., Buffalo.
Grassick, Jas., Buxton.
Darrow, Edw. M., Fargo.
Wadel, K. A., Portland.
Porter, Henry R., Bismarck.
Church, R. Jerome, Conway.

NORTH CAROLINA.

Coggeshall, George Albert, Henderson.

OHIO.

Schilling, C. E., Canton.
Ehret, G. A., Cleveland.
Knauss, W. H., Newark.
Purviance, J. F., Steubenville.

OREGON.

Hemenway, Stacy, Klamath Agency.

PENNSYLVANIA.

Sturgeon, Jno. D., Uniontown.
Nagle, Thos. S., Allentown.
Todd, D. O., Cochran Mills.
Wolfe, Sam'l N., Wilkes Barre.
Morris, Jos. P., St. Clair.
McGreevy, W. H., Scranton.
Bateson, John C., Scranton.
Bush, A. A., Mamont.
Leatherman, D. I., Williamsburg
Vinton, Chas. Harrod, Wernersville.
Walker, W. K., Dixmont.

SOUTH DAKOTA.

Keeling, Chas. Monroe, Springfield.
Raberge, Frances L., Milbank.
Stilliwell, Hiram R., Tyndall.
Gyllenhammar, F. N. H., Gayville.

TEXAS.

Fly, David Richard, Amatillo.
Halley, J. T., Galveston.
Gough, Roy H., Hereford.
Hughes, Chas. T., Gainesville.

TENNESSEE.

Buist, W. Edw., Nashville.
Smyth, Frank D., Memphis.
Preas, Jas. H., Johnson City.
Porter, A. R., Memphis.
LeRoy, Louis, Nashville.
Todd, J. D., Trezevant.

WEST VIRGINIA.

Moore, Thos. Waterman, Morgantown.
Magill, Wm. Seagrove, Morgantown.

VIRGINIA.

McCoy, Wm. Kenneth, Richmond.

WISCONSIN.

James, Q. W., Solon Springs.
Martin, M. T., Merrimack.
Boikoon, Geo. W., Clear Lake.
Read, H. M., Menomonie.
Riddle, Julia, Oshkosh.
Job, de Besche, Milwaukee.
French, Viola M., Neillsville.
Cheever, Wm. R., Kenosha.
Hopkins, Wm. B., Cumberland.
Saunders, Geo., West Superior.
Ross, A., Oshkosh.
Madden, John, Milwaukee.
Breakey, Jas. R., Alma Center.
Houck, Mary Piper, La Crosse.
Houck, Oscar, La Crosse.
Hannum, Henry, Bayfield.
Rhodes, Edson, Galesville.
Mulford, Edwin Rossiter, La Crosse.
Boyce, Sam'l R., Madison.

WYOMING.

Young, J. Henry, Cumberland.

MEXICO.

Yearwood, Kelly James, San Luis Potosi.

UTAH.

Woodring, Wm. W., Mt. Pleasant.

ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES.

16th Annual Meeting, held at St. Paul, May 30, 31, and June 1.

President Brig.-Gen. Alexander J. Stone in the chair.

Rations and the Canteen in the Army in the Tropics.

DR. LOUIS L. SEAMAN, U. S. V., New York City, showed no mercy to those who brought about the abolition of that institution. It was a telling indictment. The facts cited cut the ground from under those responsible for this disastrous "reform." He pointed out that only 5 per cent. of the enlisted men are total abstainers, that the rest are men who became accustomed to drinking before they entered the army and who will get liquor in some way whatever the obstacles. They are not prisoners, but are well-paid men who have their "pass days" or days off, as they ought to have. If liquor is denied them at the exchange they will take the first occasion to get it somewhere else. In this country the stopping of the sale of beer at the post exchange has caused the soldier to satisfy his taste for alcohol with "vile doctored whisky." In Porto Rico he turns to "rum loaded with fusel-oil," in the Philippines to the deadly "vino, a sort of wood alcohol," and in China to "shamsu," a product of rice—all "rank poisons." These maddening liquors lead to insubordination and to desertion, to debauchery and to diseases of the worst description. At the close of the discussion the following resolution was adopted:

"Whereas, The Association of Military Surgeons of the United States, now in session at St. Paul, recognizes that the abolition of the army post exchange or canteen has resulted, and must inevitably result, in an increase of intemperance, insubordination, discontent, desertion and disease in the army; therefore, be it

"Resolved, That this body deplores the action of Congress in abolishing the said post exchange or canteen, and in the interests of sanitation, morality and discipline, recommends its reestablishment at the earliest possible date."

Secondary Hemorrhage.

DR. CHRISTIAN FENGER, of Chicago, was made an honorary member, and presented an interesting paper on this subject.

The papers read were few but they elicited an animated discussion.

Clinics were given by Drs. Archibald MacLaren, Charles A. Wheaton and John F. Fulton. A reception was tendered the Association at the Aberdeen, a theater party was given at the Metropolitan Opera House, and the members were driven to Fort Snelling and there entertained by Captain and Mrs. Bradley and the officers and ladies of the post.

Election of Officers.

The following officers were elected: Major John Van R. Hoff, surgeon, U. S. Army, Washington, D. C., president; Brig.-Gen. Robert A. Blood, surgeon-general of Massachusetts, Boston, and Surgeon-General Walter H. Wyman, U. S. Marine-Hospital Service, vice-presidents; Captain James E. Pilcher, assistant surgeon, U. S. Army (ret.), secretary, and Lieut. Herbert A. Arnold, assistant surgeon, N. G. Pa., Ardmore, treasurer.

Married.

HERBERT N. RAFFERTY, M.D., to Miss Bess Alexander, both of Robinson, Ill., May 28.

V. F. LASSAGNE, M.D., Chicago, to Miss Carrie Hawley, of Eureka Springs, Ark., May 25.

ALLEN ELLIS COX, M.D., Milan, Tenn., to Miss Lucile Folk, of Brownsville, Tenn., May 30.

ABRAHAM D. MILLER, M.D., Indian Springs, Tenn., to Miss Maud Roller, of Kingsport, Tenn.

ROBERT T. SHAW, M.D., Georgetown, Colo., to Mrs. M. E. Kutus, of Lincoln, Neb., at Denver, May 22.

ANNE HOLT, M.D., Colorado Springs, Colo., to Carl E. Trulock, of Chicago, at Tullahoma, Tenn., May 6.

LOUIS GROSS, M.D., San Francisco, to Miss Ida Solomon, of Chicago, May 14. Dr. and Mrs. Gross sailed for Europe, where the doctor will study for a year.

Deaths and Obituaries.

Wm. H. Daly, M.D., University of Michigan, 1866, prominent as a physician in Pittsburg, a member of the AMERICAN MEDICAL ASSOCIATION, died from the effect of a gunshot wound of the head, self-inflicted, at his home, June 9, aged 59. Dr. Daly was a Virginian and served in the Confederate army. After his graduation, he paid especial attention to laryngology, and in 1894 was made president of the American Laryngological Association, and three years later served as president of the American Laryngological, Rhinological and Otological Society. He was a member and for ten years secretary of the Allegheny County Medical Society, a member of the Medical Society of Pennsylvania; Association of Military Surgeons of the United States; British Medical Association and other societies, and served several times as delegate to foreign medical societies and congresses. He was also for a long time a member of the Medical Department of the National Guard of Pennsylvania. At the outbreak of the Spanish-American War he was appointed major and chief surgeon of volunteers and was assigned to duty on the staff of General Miles. After the war he had the misfortune to lose his wife and he became melancholy, lost all interest in his practice and all pleasure in his life, and this, together with the notoriety and implied censure regarding the "embalmed" beef scandal, undoubtedly drove him to suicide.

William S. Caldwell, M.D., Jefferson Medical College, Philadelphia, 1864, a member of the AMERICAN MEDICAL ASSOCIATION, and well known to the readers of THE JOURNAL as the writer of "Rambling Notes of a Roving Doctor," died at his home in Freeport, Ill., June 7, from paralysis, aged 68. Dr. Caldwell was a prominent feature in the medical world, he was at the head of the profession of northwestern Illinois; a man of broad learning, widely traveled and a close student of human nature. He was a native of South Carolina and lived until the age of 14 in Arkansas and the Indian Territory. After his graduation in medicine he settled down to practice in Elizabeth, after 15 years moved to Warren and eight years later to Freeport, in the meantime spending three years in study in Europe. In addition to his membership in the National Association, he was a member of the British Gynecological, Mississippi Valley, International Railway Surgeons' Associations and the Illinois State Medical Society.

John L. Feeny, M.D., New York University, 1866, died at his home in Stapleton, Staten Island, N. Y., May 31, aged 56. For years he was a police surgeon, subsequently health officer of the village of Edgewater and then a supervisor of the county until 1893, when it was consolidated with New York City. Afterwards he became assistant sanitary superintendent of the borough.

Lewis S. Tesson, M.D., major and surgeon, U. S. Army, a native of Missouri, who became a member of the Medical Department of the Army in 1875, and had served at many important army posts, died at Vancouver Barracks, Wash., where he was stationed as Medical Director of the Department of the Columbia, June 8, from apoplexy, after an illness of one month, aged 59.

E. Paul Sale, M.D., Tulane University, New Orleans, 1869, a member of the AMERICAN MEDICAL ASSOCIATION, of the State, Tri-State, Mississippi Valley and Memphis Medical Associations, and professor of materia medica and therapeutics in Memphis Medical College, died June 7 from injuries received by being thrown from his horse against a stone curb.

Hugh Stockdell, M.D., Jefferson Medical College, Philadelphia, 1859, who had practiced in Petersburg, Va., for more than forty years, with the exception of the period of the Civil War, when he served with distinction as surgeon and later as chief medical purveyor in the Confederate Army, died May 23, at his home, after a lingering illness, aged 65.

Dwight Mereness, M.D., Long Island College Hospital, Brooklyn, N. Y., 1886, a well-known and esteemed physician of Milwaukee, died at Trinity Hospital in that city, May 29, after an operation, aged 41. He was a member of the local

and state societies and of the AMERICAN MEDICAL ASSOCIATION.

John E. Comfort, M.D., Albany (N. Y.) Medical College, 1864, died at his home in the Borough of the Bronx, New York City, May 29, aged 63 years. For more than thirty years he was in active practice in the upper wards of New York and served twelve years as Health Board inspector.

Allen T. Barnes, M.D., Kentucky School of Medicine, Louisville, 1857, for many years postmaster of Bloomington, and previously superintendent of the Illinois Southern Hospital for the Insane, Anna, died at his home in Bloomington, May 30, from pneumonia, aged 67.

John Spare, M.D., Howard University Medical School, Boston, 1842, who had resided in New Bedford, Mass., for more than half a century and who served as a surgeon in the navy during the Civil War, died at his home in New Bedford, May 22, aged 84.

George Sterne Osborne, M.D., Harvard Medical School, Boston, 1862, who served during the Civil War as surgeon in the Union Army, and then, after two years of study abroad, settled in Peabody, Mass., died at his home in Salem, Mass., May 25.

Francis W. Coleman, M.D., Tulane University, New Orleans, La., 1866, one of the most widely-known physicians of Mississippi who had practiced at Rodney for thirty-five years, died suddenly in a hotel in New Orleans, May 28, aged 55.

James R. Bayley, M.D., University of Cincinnati, Ohio, 1851, an active practitioner of Oregon, formerly a member of its Territorial Council, and of its State Senate, died at his home in Newport, Ore., May 24, aged 81.

Allen M. Sumner, M.D., Harvard University Medical School, 1868, for many years visiting and consulting physician at the Boston City Hospital, died at his home in Boston, May 25, from acute nephritis, aged 57.

Charles F. Close, M.D., University of Iowa, Iowa City, 1896, a member of the AMERICAN MEDICAL ASSOCIATION, and a resident of Chicago, died from consumption at Los Angeles, Cal., May 29, aged 27.

La Baume Elliott, M.D., University of Nashville, Tenn., 1854, the oldest practitioner of Dallas, Texas, died at his home in that city, May 23, aged 78. He served as surgeon in the Confederate army.

Lillian E. Abbott, M.D., Woman's Medical College, New York, 1892, a member of the New Hampshire State Medical Society, died as a result of poison self-administered, May 28, aged 33.

Demetrius P. Sypert, M.D., University of Nashville, Tenn., 1866, a prominent physician of Montgomery County, died at his home in Clarksville, Tenn., from apoplexy, May 21, aged 60.

Henry Tyler Phillips, M.D., Albany Medical College, 1860, who had practiced in Cheshire, Mass., for forty years, died there after a short illness, from diabetes, May 24, aged 67.

Abram J. Miller, M.D., Rush Medical College, Chicago, 1858, the Nestor of the local profession, died at his home in Paris, Ill., after a prolonged illness, May 22, aged 78.

Jesse W. Allen, M.D., Vanderbilt University, Nashville, Tenn., 1880, a prominent physician of Guthrie, Ky., died suddenly at his residence in that place, May 28, aged 45.

Wright L. Witham, M.D., Ohio Medical College, Cincinnati, 1900, was instantly killed by lightning at his home, South Lebanon, Ohio, May 24.

Elmer C. Goldthorpe, M.D., College of Physicians and Surgeons, Chicago, 1893, died at his home in Englewood, Chicago, May 18, aged 35.

Thomas E. Fitzgerald, M.D., New York University, 1895, died at his home in Jersey City, N. J., May 21, after a long illness, aged 26.

J. H. Miller, M.D., University of Pennsylvania, Philadelphia, 1891, died at his home in Sheridan, Mont., May 21, aged 35 years.

Edwin H. Austin, M.D., Detroit Medical College, 1880, died at his home in Gaines, Mich., May 22, from pneumonia, aged 45.

Demetrius P. Sypert, M.D., University of Nashville, 1866, died from apoplexy at his home at Clarksville, Tenn., May 21.

Frank J. Webb, M.D., Howard University, Washington, D.C., 1895, died at his home in Washington, D.C., May 18.

George J. Heitzmann, M.D., Paris, France, 1849, died suddenly at his home in Marinette, Wis., May 22, aged 62.

George J. Heitzmann, M.D., Paris, France, 1849, died suddenly at his home in Marinette, Wis., May 21.

A. N. Brackett, M.D., Vermont Medical College, Woodstock, 1851, died at Negro, Va., May 14.

Book Notices.

DISEASES OF THE HEART. A Clinical Text-Book for the Use of Students and Practitioners of Medicine. By Edmund Henry Colbeck, B.A., M.D., Cantab.; M.R.C.P., London; D.P.H., Cantab., Physician to the Out-Patients at the City of London Hospital for Diseases of the Chest. With 43 Illustrations. Cloth. Pp. 341. Price, 12 shillings. London: Methuen & Co. 1901.

This volume is attractive and neat in appearance. The material is well arranged and classified and the various subdivisions are marked in full-faced type, rendering it easy to find what one is seeking. The index is well arranged and comprehensive, which is a most important feature of a text-book. Probably the most instructive chapter for the student is that on "Method of Diagnosis." Each method of physical diagnosis is gone into thoroughly and cause and effect are dealt with in detail. The chapters on the various endocardial lesions are concisely written, but that on mitral incompetence is amplified so that its study will give one a working basis of knowledge for the other endocardial affections. Altogether the book is well written and is worthy of a place on the table of both the student and practitioner.

AN INTRODUCTION TO PHYSIOLOGY. By William T. Porter, M.D., Associate Professor of Physiology in the Harvard Medical School. Cloth. Pp. 314. Price, $2.50. Cambridge, Mass.: The University Press. 1901.

The leading principle in the system of teaching contemplated by this "Introduction" is that the student shall perform for himself the fundamental experiments of the science. As all experiments in physiology can not be performed in the time now ordinarily devoted to its teaching in medical schools, a careful selection must be made. In order to master at least one field necessary for the scientific training requisite for further independent study, the nerve and muscle has been selected as the part best adapted for exact observation and clear reasoning. Hence the experimental physiology of the nerve-muscle preparation is thoroughly set forth from various points of view. Then the mechanics of the circulation and the innervation of the heart and blood vessels are discussed. The apparatus described is trustworthy and quite simple. The subjects are presented from the chemico-physical standpoint, and the book is recommended as an excellent guide for the purposes indicated. It is illustrated with 57 figures.

A TREATISE ON DISEASES OF THE NOSE AND THROAT. By Ernest L. Shurly, M.D., Vice-President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine. Illustrated. Cloth. Pp. 744. Price, $5.00. New York: Appleton & Co. 1900.

This volume has been prepared specially as a practical guide to the general practitioner and medical student. The etiology, symptomatology, pathology and treatment of the various affections of the nose and throat are thoroughly discussed, yet with a conciseness that eliminates useless speculation on unimportant theories. The book opens with a chapter on the anatomy of the parts and closes with a list of prescriptions for convenience and ready reference. The Latin is occasionally wrong, as for instance, *meati* for *meatus* or the Anglicised form "meat-

uses," on p. 512. The illustrations are numerous, while the colored plates appear to have been inserted with a view to being exact and instructive, rather than brilliantly beautiful as often is the case in representations of the mucous membrane. We unhesitatingly recommend the book.

Miscellany.

The Slow Growth of Fees.—To Astley Cooper as to most men who rise to eminence, says an authentic biography, "remunerative practice came but slowly." "My receipts," says he, "for the first year was £5 5s; the second, £26; the third, £54; the fourth, £96; the fifth, £100; the sixth, £200; the seventh, £400; the eighth, £610; the ninth (the year in which he was appointed surgeon to the hospital), £1100.

Determination of the Acidity of the Urine.—O. Naegli observes that the acidity of the urine is only that excess of acid above the point where it is neutralized by the alkalinity. The urine may contain large amounts of acid and also large amounts of alkalies, and the point of neutralization be proportionately high. Titration of the bases, therefore, is the only means to determine the actual acidity, and phenol phthallein is the best test for the excess above the point of neutralization. He describes his method in the *Ztft. f. Psysic. Chemie*, xxx, 1900, p. 313.

The International Congress of Insurance Examiners.—The second international congress of physicians connected with life and accident insurance companies is to be held at Amsterdam in September, as already announced. Professor Brouardel, officially connected with the Equitable, of New York, is one of the secretaries, 28 rue de Chateaudun, Paris. A committee is to report on the universal medical formula for insurance examiners. Stokvis will deliver the address on albuminuria and Siredey on glycosuria in their relation to life insurance. Other subjects to be discussed from the same standpoint are otitis media, hereditary taints, syphilis and cutaneous diseases, tremors, appendicitis and eye affections. Crocq will speak on the importance of the reflexes in examining for life insurance, and others on the acceptance of persons who have resided in tropical countries.

Responsibility for Count of Sponges in Surgical Operations.—Many will recall the suit for malpractice brought some time ago against a surgeon of Columbus, Ohio, for the death of a patient from a gauze sponge which had been left in the abdomen after a gall-stone operation. The operation had been made in a public hospital and the head nurse of the hospital had been personally in charge of the sponges. In response to the surgeon's inquiry, thrice repeated, she had assured him that all her sponges were accounted for, and the abdomen was therefore closed. Recovery was prompt, but some two months later obstruction of the bowels supervened and an operation, made when the patient was practically moribund, revealed the presence of a sponge as the cause of the obstruction. The attorneys who instituted the suit, while admitting that the surgeon himself had adopted the usual precautions and that the death was the result of the act of the nurse, claimed that the nurse was technically the agent of the surgeon and that the latter was therefore responsible for her blunder. A similar suit, and on similar grounds, was instituted about the same time against an Atlanta, Ga., surgeon. The Atlanta case was tried some months ago and the surgeon promptly acquitted; the individual responsibility of the nurse having apparently been proven to the satisfaction of the jury. The decision in the Atlanta case is supposed to have been the actuating cause which recently led the attorneys at Columbus to withdraw their suit, at their own costs, and institute proceedings against the hospital where the operation was made. This suit has only just been filed and the outcome will be watched with much interest, since the suit presents some novel features. The decision in the Atlanta case and the withdrawal of the suit in the Columbus case will go far to establish the principle that when the surgeon is operating with a graduate nurse in charge of the sponges he can not be held responsible for her carelessness, unless from previous experience he knows her to be untrustworthy.

Societies.

COMING MEETINGS.

Colorado State Medical Society, Denver, June 18.
Medical Society of New Jersey, Deal Beach, June 25-27.
Wisconsin State Medical Society, Waukesha, June 26.
Medical Association of Nevada, Reno, July 1.
American Ophthalmological Society, New London, Conn., July 17.

Chicago Academy of Medicine.—At the annual meeting of this organization, May 24, Drs. W. L. Baum, J. G. Kiernan and H. N. Moyer were chosen directors for the coming year.

Physicians' Club (Chicago).—At the annual meeting of this club, May 27, Drs. W. S. Christopher, Joseph Zeisler and G. Frank Lydston were elected directors, and Dr. L. Harrison Mettler was re-elected secretary and treasurer.

Ophthalmological and Otological Society of Washington, D.C.—At the thirty-seventh annual meeting of this Society, Dr. Stephen O. Richey was elected president; Dr. William H. Wilmer, vice-president, and Dr. Anton Coe, secretary and treasurer.

First District Branch of the New York State Medical Association.—The annual meeting of this body was held at Utica, May 21. Dr. C. B. Tefft, Utica, was elected president; Dr. J. W. Douglas, Boonville, vice-president, and Dr. E. H. Douglas, Little Falls, secretary and treasurer.

American Dermatological Association.—This Association held its twenty-fifth annual convention in Chicago, May 29, 30 and 31. Dr. George Jackson, New York City, was elected president; Dr. Joseph Zeisler, Chicago, vice-president, and Dr. Frank H. Montgomery, Chicago, secretary and treasurer.

American Association of Life Insurance Examining Surgeons.—The second annual convention of this body was held in St. Paul, June 3. The following officers were elected: Dr. James H. Stowell, Chicago, president; Drs. James H. Reed, Battle Creek, Mich., and Talbot Jones, St. Paul, Minn., vice-presidents, and Dr. Thomas A. Stevens, Caney, Kan., was re-elected secretary-treasurer.

Health Officers' Association of Indiana.—At the eleventh annual conference of the Indiana state health officers, a new association was organized, known as the Health Officers' Association of Indiana, with the following officers: Dr. Brose S. Horne, Bluffton, president; Dr. Nathaniel D. Cox, Spencer, vice-president; Dr. Albert E. Powell, Marion, secretary, and Dr. Hugh A. Cowing, Muncie, treasurer.

North Dakota State Medical Society.—The fourteenth annual meeting of this Society was held at Fargo, May 22 and 23. The following officers were elected: Dr. Harry D. Quarry, Grand Forks, president; Drs. Tonnes Thams, Fargo, and Sidney B. Clark, Buffalo, vice-presidents; Dr. E. C. Branch, Wheatland, secretary, and Dr. William L. Grant, St. Thomas, treasurer. The 1902 meeting will be held in Grank Forks.

Connecticut Medical Society.—The one hundred and ninth annual meeting of this Society was held at Hartford, May 22 and 23. Dr. John H. Grannis, Saybrook, was elected president; Dr. J. A. Shelton, Shelton, vice-president; Dr. W. W. Knight, Hartford, treasurer, and Dr. J. H. Townsend, New Haven, assistant secretary. Dr. Charles S. Rodman, Waterbury, was chosen as delegate to THE AMERICAN MEDICAL ASSOCIATION.

Medical Association of Montana.—At the annual meeting of this body, held at Great Falls, the following officers were elected: Dr. Thomas J. Murray, Butte, president; Dr. T. J. McKenzie, Anaconda, and Louis Bernheim, Butte, vice-presidents; Dr. Benjamin C. Brooke, Helena, secretary; Dr. James F. Spelman, Anaconda, corresponding secretary and historian, and Dr. George H. Barbour, Helena, treasurer. Butte was selected as the place for the next meeting.

Medical Society of the State of West Virginia.—At the annual meeting of this Society held in Grafton, May 22, 23 and 24, the following officers were elected: Dr. G. A. Aschmann, Wheeling, president; Drs. C. F. Amos, Lumberport, Olin H. Hoffman, Thomas, Archibald Staunton, Charleston, and Rolla Camden, Parkersburg, vice-presidents; Dr. William W. Golden, Elkins, secretary, and Alonzo Andrews, Martinsburg, treasurer. The 1902 meeting will be held in Martinsburg.

Kentucky State Medical Society.—The forty-sixth annual meeting of this Society was held at Louisville, May 22, 23 and 24. The election of officers resulted as follows: Dr. T. B. Greenley, Meadow Lawn, president; Drs. George M. Reddish,

Somerset, and B. L. Coleman, Lexington, vice-presidents; Dr. Steele Bailey, Stanford, secretary; Dr. Charles W. Aitkin, Flemingsburg, treasurer, and Dr. Frank L. Lapsley, Paris, librarian. The society will meet next year in Paducah.

Medical Society of the State of North Carolina.—This Society held its forty-eighth annual meeting at Durham, May 21, 22 and 23. The following officers were elected: Dr. Robert S. Young, Concord, president; Drs. Albert G. Carr, Durham, Isaac G. Taylor, Morganton, E. Dixon Carroll, Raleigh, and James M. Parrot, Kinston, vice-presidents. Drs. George W. Pressly, Charlotte, and Ginnada T. Sikes, Grisson, were re-elected secretary and treasurer respectively. Wilmington was selected for the 1902 meeting.

The Alumni Association of the John A. Creighton Medical College held its annual meeting at Omaha, May 7, and elected Dr. E. C. Henry, Omaha, president; Dr. Rudolph Rix, Omaha, secretary, and Dr. A. G. Wiley, South Omaha, treasurer. The meeting concluded with a banquet at which 50 alumni, including the class of 1901, 27 in number, were present. Dr. E. C. Henry was the toastmaster. Dr. B. M. Riley delivered the address of welcome to the new class, which was responded to by Dr. H. L. Akin.

Missouri Medical Association.—The forty-third annual meeting of this Association was held at Jefferson City, May 21 and 22. The following officers were elected: Dr. Jefferson D. Griffith, Kansas City, president; Drs. Robert E. Young, Jefferson City, John C. Whaley, Osceola, Robert M. Funkhouser, St. Louis, John F. Campbell, Callao, and George W. Vineyard, Jackson, vice-presidents; Dr. B. Clark Hyde, Kansas City, recording secretary; Dr. F. W. Burke, Laclede, assistant recording secretary; Dr. Charles W. Fassett, St. Joseph, corresponding secretary, and Dr. J. Franklin Welch, Salisbury, treasurer. St. Joseph was chosen as the next place of meeting.

American Pediatric Society.—This society held its annual meeting at the Hotel International, Niagara Falls, N.Y., May 27, 28 and 29. Papers were presented by Drs. Osler, Abram Jacobi, T. M. Rotch. Frederick A. Packard, Henry Koplik, F. Forchheimer J. Crozer Griffith and other prominent pediatrists. The following officers were elected: Dr. William D. Booker, Baltimore, president; Drs. Frederick A. Packard, Philadelphia, and J. Lovett Morse, Boston, vice-presidents; Dr. Samuel S. Adams, Washington, D. C., secretary; Dr. J. Park West, Bellaire, Ohio, treasurer, and Dr. Walter Lister Carr, New York City, recorder and editor.

The American Medical Library Association met at the hall of the Medical and Chirurgical Faculty, Baltimore, May 25. Receipts for year $644, expenses, $358. Six new libraries were admitted, including the Bristol University Library, England. The following officers were elected: Dr. William Osler, president; Mr. John S. Brown, New York Academy of Medicine, vice-president; Miss M. R. Charlton, McGill University, Montreal, secretary; Dr. George D. Hersey, Rhode Island Medical Society, treasurer; Drs. Osler and Jas. C. Merrill, Mr. Charles Perry Fisher, executive committee. It was decided that in order to join the Association a library must have at least 1000 volumes, and be open at regular hours to the medical profession. A gift of 1000 volumes was received from the Philadelphia College of Physicians. It was decided to issue a bulletin as often as material should accumulate and the interests of the association required it.

KENTUCKY STATE MEDICAL SOCIETY.

Forty-sixth Annual Meeting, held at Louisville, May 22-24, 1901.

The president, Dr. James H. Letcher, of Henderson, in the Chair.

President's Address.

This address was extremely interesting. Among other things, the President suggested a complete revision of the Constitution and By-Laws of the Society so as to have them more in keeping with present conditions. The revision should conform as nearly as possible to the work of the AMERICAN MEDICAL ASSOCIATION. The popular address was delivered by Hon. Young E. Allison, of Louisville.

Medical Organization.

DR. J. N. MCCORMACK, Bowling Green, read a paper on the necessity of medical education, which was the report of the Committee on Public Policy. He advocated the formation of medical societies in every county and state in the Union. Every physician in this country should at least be a member of his county society in order to strengthen his profession and give it a standing in the community. From each local society delegates are to be selected to attend the county society; from the county society, delegates should be selected to attend the state society, and from this delegates to the meeting of the AMERICAN MEDICAL ASSOCIATION. He urged the adoption of the plan of organization outlined by the AMERICAN MEDICAL ASSOCIATION.

The Society endorsed the report of Dr. McCormack and moved the appointment of a committee on organization.

Conduct of the Second Stage of Labor in Private Practice.

DR. EDWARD SPEIDEL, Louisville, read a paper with this title. He dwelt on the necessity of exercising the strictest aseptic precautions in this work and described his method of preparing the patient, bed, nurse and himself. In place of the usual absorbent pad he uses a bag containing one-half bushel of bran, which possesses great absorptive power. The use of chloroform during pains lessens the liability of perineal tears. Immediately after birth he places the child across the abdomen of the mother. In this position it is not only out of the way, but by its weight also exerts some influence on uterine contractions. He exhibited a small obstetric case devised by him, which contains all the necessary material for conducting labor on an aseptic basis.

Some Interesting Experiences in Obstetrics.

DR. W. E. SLEEP, Midway, reported three unusual cases. After the birth of a still-born baby the placenta was found to contain another child, the development of which had ceased at about the third month. The second case was complicated by an hourglass-shaped tumor just beneath the pubic arch. The patient was successfully delivered and recovered without complication. Six months afterward the growth had entirely disappeared without practically any treatment. In the third case four children had died successively from icterus neonatorum. An autopsy on the last child revealed a complete abscess of the common bile duct.

Miscarriage and its Treatment.

DR. W. D. GOSSETT, Louisville, urged that the term abortion be limited to those cases in which there was criminal interference and that the term miscarriage be used to designate emptying of the uterus before the viability of the child. The entire subject of miscarriage was very carefully reviewed and special attention was called to ascertaining positively that the uterus has been entirely emptied of its contents. The curette should be used when necessary, but only under the strictest antiseptic precautions. The essayist believes that curetment is usually looked upon as a simple procedure. In his opinion it is an extremely grave one and should be performed by men who have had some experience in the use of the curette.

The Puerperium.

DR. JOHN G. CECIL, Louisville, considered the management of this state. Strict asepsis, complete rest and diet are essential. All meddlesome interference should be abstained from. The routine administration of ergot and practice of post-partum douching are designated as most "pernicious." They should be used only when there is a positive indication for them, and then by a competent person. The same applies to the use of the curette. The abdominal binder should always be applied as a support to the relaxed abdominal wall and a stimulus to uterine contractions.

Instrumental and Operative Obstetrics.

DR. A. P. MCCORMACK, Bowling Green, dwelt upon the necessity and importance of making frequent examinations of the urine and taking pelvic measurements. Podalic version should invariably receive the preference over mechanical interference. Forceps should rarely be applied before the head is engaged, except when rapid delivery is necessary. Symphyseotomy should never be done as an emergency operation. It is unsafe, unscientific and frequently followed by disastrous results. When indicated, Cesarean section should be promptly performed. The various obstetric operations are considered in

detail. The indications and manner of performing them are fully described. The vaginal tampon is condemned. He especially advises the careful inspection of the genital tract after labor and the immediate repair of any cervical or perineal laceration. Both the eye and finger should be used in looking for these tears.

The Clinical Examination of the Blood in Diagnosis.

DR. L. B. COOK, Stanford, dwelt on the importance of blood examinations. The pathology of the blood was described in the following diseases: anemia, pernicious anemia, chlorosis and leukemia. The Widal reaction was described and its significance given. The various animal organisms found in the blood, especially malarial protozoön, are fully described.

Substance of Cell Life and the Germs Considered from the Standpoint of Natural Phenomena.

DR. URBAN V. WILLIAMS, Frankfort, presented this paper. It was largely metaphysical, dealing with the origin of all matter and the forces and conditions necessary to convert the original matter into the different kinds now found. Its relation to disease is also considered.

Typhoid Fever in Infancy.

DR. JAMES B. KINNARD, Lancaster, called attention to the great difficulty in making a diagnosis of this disease in children. He advocates the unrestricted use of water, internal and external, but restricts the diet to milk, either the mother's milk or peptonized milk. Antipyretics should only be used when the baths fail to reduce the temperature. Complications are treated symptomatically as they arise.

A Few Rambling Thoughts on Infant Feeding.

DR. HENRY E. TULEY, Louisville, said that there is no substitute for healthy mother's milk. The nearest approach to it is cow's milk. It is cheap, always obtainable, and capable of modification. The successful use of cow's milk is dependent on the clear understanding of its modification by the percentage method. Raw milk is superior to sterilized or pasteurized. Every precaution should be taken during the milking process and the delivery of the milk so as to keep it pure and sweet. Carefully watching the stools, sleep and wake of the infant is essential to the proper appreciation of its progress. Regular feeding is important. The mother should avoid everything tending to affect the flow or quality of the milk. Barley water, rice water or flour-ball water, dextrinized, are the best diluents. The percentage of fats, proteids and carbohydrates must be governed entirely by the progress of the child.

Cure for Enuresis.

DR. PHILLIP F. BARBOUR, Louisville, reviewed at some length the etiology, symptoms and treatment of this affection.

Hip-Joint Amputation—Report of Case.

DR. W. O. ROBERTS, Louisville, gave a brief résumé of the various operations devised and also the methods for controlling hemorrhage, which is the chief element of danger in this operation. He advises the unlimited injection of normal salt solution, as it stimulates the heart and respiratory centers. Amputation should not be deferred, as that lessens the chance of recovery. A case was presented in which hip-joint amputation was performed according to Wyeth's method.

Sterilization of Suture Material.

DR. AUGUST SCHACHNER, Louisville, spoke on the frequent occurrence of infection from suture material and ligatures. Therefore, the utmost vigilance should be used in having the sutures and ligatures, especially the catgut, absolutely sterile. The Cumol method of sterilization is probably the best. The author presented a metal cup devised by him for the sterilization and carrying of suture material. It is absolutely nonbreakable and completely air-tight, effectually obviating the danger of infection. It can be easily carried about, and is therefore especially serviceable in country practice and in military surgery.

Ventral Hernia; Its Prevention and Cure.

DR. LOUIS FRANK, Louisville, said that perfect technique and strict asepsis should make the occurrence of ventral hernia an impossibility, except in those cases where it is impossible to procure absolute asepsis. All ventral hernias, even the congenital variety, are curable either by the application of a suitable bandage or by operation. The writer believes that excessive omental development is a factor in the production and maintenance of congenital hernia; therefore, he invariably removes quite a bit of omental tissue. He reports a number of cases operated on, describing his method in full, none of which have had a recurrence of the hernia.

The Management of Abscesses of the Antrum of Highmore.

DR. M. F. COONES, Louisville, said that the most important thing in treating these diseases is to maintain thorough drainage, as the secretions rapidly decompose. The opening should be made sufficiently large for this purpose and the application of such antiseptics as will rapidly bring the disease under control. Gauze drains are preferable to drainage tubes, which are really worthless. The canine fossa to the place of election for opening the antrum.

The Ophthalmoscopic Diagnosis of Bright's Disease.

DR. DUDLEY S. REYNOLDS, Louisville, said this is sometimes of great importance, but requires expert judgment and can never be made until the renal disease has reached a dangerous stage. Failing vision is the first symptom, and leads the patient to seek relief. Few persons with retinitis albuminurica live beyond twelve months from the beginning of the affection. Fatty deposits in the retina, presenting a series of radiatory striations around the macula, with some deposits in other parts of the retina and occasional disseminated hemorrhagic effusions with tortuous retinal arteries are never seen without co-existing renal disease.

The Pathology of Bright's Disease.

DR. GEO. E. DAVIS, Lawrenceburg, after a review of the histology and physiology of the kidney, considered the pathologic changes in structure and function which produced the symptoms of albuminuria, dropsy and uremia.

DR. ANDREW SARGENT, Hopkinsville, briefly mentioned the most important diagnostic features of acute and chronic Bright's disease.

DR. A. G. BLINCOE, Bardstown, dwelt on the importance of rest and a strict milk diet. The symptoms should be treated as they arise.

DR. L. L. SOLOMON, Louisville, described in full the dietetic, hygienic and medicinal treatment. A special stress was laid on the indications and contraindications of drugs in this affection.

Analgesia by the Spinal Subaracnoid Injection of Cocain.

DR. J. GARLAND SHERRILL, Louisville, gave a full history of the origin of this method and also the manner of carrying it out. The principal points to which the author called attention were, first, the dangers: shock due to the injection of the cocain; danger to the cord and centers in the medulla; action of cocain on the heart; the immediate danger of meningitis and myelitis from infection occurring through improper aseptic precautions. The arguments for the method are: 1, the condition of the patient is much better after its use than after the use of a general anesthetic; 2, it can be used in many cases in which a general anesthetic is contraindicated, in fact dangerous; 3, it simplifies the operation considerably; 4, it lessens the patient's fear and therefore keeps him in much better condition, lessening the danger from shock. The following are the objections to the method: 1, an individual idiosyncrasy to cocain; 2, the method is claimed to be a dangerous one by those who have either never used it or used it improperly, so that complications have resulted.

DR. J. G. CARPENTER, Standford, read a paper on "Appendicitis—Early Operation from a Pathologic Standpoint."

Stricture of the Male Urethra.

DR. HENRY H. KOEHLER, Louisville, gave a very full and careful résumé of all the present methods of treatment of this condition. He believes that the method of extensive dilatation is followed by no evil consequences and is the only one

by means of which we can clear the canal of its latent foci of gonococci. The steel sound should be used, and the method is applicable to strictures in any portion of the urethra. Strictures not responding to dilatation can be cured by an internal or external urethrotomy or a combination of both, or by forcible dilatation according to the method of Holland and Pereve, or by progressive dilatation according to Le Fort's method. The strictest antiseptic precautions must be observed, no matter which method is used. A careful urinalysis should be made in all stricture cases. Metallic dilators are to be preferred, as they are more easily kept clean. Urotropin, in 5 to 10 grain doses, is the best internal antiseptic.

Urethroscopy.

DR. WM. R. BLUE, Louisville, gave a detailed description of the indication and uses for the urethroscope. This instrument has simplified the diagnosis as well as the treatment of urethral and bladder diseases most decidedly. We can now easily treat mucous patches, urethral chancroids, hypertrophied follicles, abscesses, strictures, etc. The most satisfactory instrument is that of Scholl, which allows the urethra to be studied as a cylinder and not as a collapsed tube. He advised that plenty of time should be taken in making an examination with the urethroscope, as many failures are due to hurried examinations.

The Necessity of Medical Organization.

DR. J. N. MCCORMACK, Bowling Green, dwelt upon the urgent necessity for the medical profession of the various states in this country to perfect their organization. He advocated the formation of medical societies in every city and county in the state. That each local society send delegates to the county society, and that each county society send delegates to the state society, which is to elect the delegates to the AMERICAN MEDICAL ASSOCIATION. He believes that it will do away with much of the petty jealousy now existing among physicians everywhere, not only in the city, but in the country as well. In union there is strength, and every step should be taken to effect that union, by making every physician in this country a member of some medical society. This paper was fully discussed by Dr. J. M. Mathews, who handed in the resolutions referred to in THE JOURNAL of June 1, p. 1573. Drs. Richmond, Reynolds, Weidner, Vance and Godshaw also took part in the discussion, which was closed by Dr. McCormack.

The Practical Management of Smallpox.

DR. N. K. ALLEN, Louisville, referred to the legislation passed in this state as to vaccination, and described the proper method for performing it. He also called attention to the immediate isolation of all cases, the proper disinfection of the habitation and the vaccination of all persons exposed to the disease.

DR. ANCIL D. PRICE, Louisville, read a paper on "The Imperative Necessity of General Vaccination."

Gunshot Wound of the Right Lung with Complications.

DR. A. M. MORRISON, Goshen, cited a case of a gunshot wound of the right lung which was followed by an empyema and finally to recovery. This was complete except for occasional prolonged paroxysms of coughing, which sometimes threatened suffocation. About a year later the boy was taken with an exceptionally violent fit of coughing, during which he coughed up a strip of gauze which had originally been packed into the wound made in treating the empyema. After this gauze had been extruded complete recovery followed.

Report of two Cases of Aneurysm.

DR. J. L. ATKINSON, Campbellsville, reported an aneurysm of the ulnar artery and one of the femoral artery, just below Hunter's canal. In both cases the vessels were ligated, the cavities opened and emptied of clots. The patients recovered without any untoward symptoms.

DR. BASIL M. TAYLOR, Greensburg: The author protested against the use of stimulants and milk in "typhoid fever," and pleaded for the treatment of the patient and not of the disease. Several cases are recorded in which his treatment is outlined in detail, and all of which made an uneventful recovery.

Tubercular Peritonitis.

DR. BEN CARLOS FRAZIER, Louisville, gave a complete review of all the literature of "Tubercular Peritonitis" and described in full the nature of the affection. The various methods of treatment are dwelt upon and the necessity of prompt surgical interference is urged.

DR. J. LIVELY JOHNSON, Louisville, read a paper on "Ununited Fractures and their Treatment."

Surgical Emergencies from a Medico-Legal Standpoint.

DR. C. C. GODSHAW, Louisville, narrated a case of surgical emergency which he was called to attend by the foreman in the factory where the injury was inflicted. The payment of his bill was refused by the company on the grounds that he was not called by them. All attempts to collect the bill proved unsuccessful and the author finally resorted to legal means to force collection. The opinions of the various courts before which the case was tried are given in full. It was finally lost on the ground that the foreman of a factory has no right whatever to obligate his employers to the payment of any bill.

Surgical Treatment of Inguinal Hernia.

DR. J. T. DUNN, Louisville, advises the selection of a method which in the individual case is the most applicable and the least complicated. Personally, he favors the Bassini method, which has materially reduced the occurrence of relapses and the mortality rate from this disease. This, as well as all the other surgical methods devised, is described in detail by the writer.

DR. T. B. GREENLEY, Meadow Lawn, read a paper on "The Longevity of the People of 70 Years and over Living in the Valley below the City of Louisville, called Pond's Settlement, within the last half century." It is a paper dwelling especially on the fact that, in spite of the frequent and constant occurrence of malaria in the districts referred to, the majority of people over 70 years of age in the State of Kentucky have lived in this district. He does not attempt to explain the reasons for this fact.

Election of Officers.

The following officers were elected for the ensuing year: Dr. T. B. Greenley, of Meadow Lawn, president; Drs. Geo. F. Reddish, of Summerset, and D. L. Coleman, of Lexington, vice-presidents; Dr. Steele Bailey, of Standford, secretary; Dr. Charles W. Atkin, of Flemingsburg, treasurer; Dr. Frank L. Lapsley, of Paris, librarian; Dr. Frank Boyd, of Paducah, chairman of the committee on arrangements. Paducah was selected as the next place of meeting the fourth week in May.

NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

Eleventh Annual Meeting, held in the House of Representatives, St. Paul, Minn., June 3, 1901.

President Dr. J. N. McCormack, of Bowling Green, Ky., in the Chair.

Report of the Committee on Interstate Reciprocity and Uniform Medical Legislation.

DR. EMIL AMBERG read this report and said that the first step toward interstate reciprocity and uniform medical legislation must be established in the various political divisions by forming the medical law so that interstate reciprocity is allowed. The second step consists in establishing the standard for physicians who are permitted to practice. The third step consists in an arrangement by which the findings of one board may be accepted by another board.

The committee reported with satisfaction that the progress along all lines mentioned had been satisfactory during the last year. In regard to the first point the committee reported that the law permitted reciprocity in the following political divisions: District of Columbia, Delaware, Illinois, Indiana, Kansas, Maryland, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Virginia, Washington, and Wisconsin. Concerning the second point the Committee noted with satisfaction progress in Indiana and Washington.

With reference to the third point, the New England states showed that the division into groups is practicable and desirable.

The demand for uniformity of medical education is apparent. The establishment of uniformity is possible. It can be established through the examining boards, aided by the profession and by the public.

The committee came to the following conclusions:

1. The acceptance by the weaker divisions without examination of applicants from states having higher requirements without demanding reciprocal recognition, and the discrimination of medical boards against inferior schools in their own states reveals a commendable spirit.

2. As a step towards interstate reciprocity the committee commended the action already begun of reciprocal arrangements and agreements between the boards of the several states having laws which provide for reciprocity and whose requirements are similar. This will result in the formation of groups of states with established reciprocity.

It is recommended that the members of the confederation from states in which the standard of requirements is not yet sufficiently high, use faithfully the argument that interstate reciprocity can be obtained for the practitioners of that state only upon the basis of such legislation as will bring the standard up to that required in the states with which they intend to establish reciprocity. The three principal points considered were: 1. That the law in any political division should require or authorize the examination of all applicants for license by a competent examining board. 2. That to be eligible to examination the applicant should be required to furnish to the examining board evidence of having graduated from a reputable medical college in good standing with the board in the state in which said college is located and with the board to which application is made. 3. Examinations should be uniform throughout the states as to subjects or branches upon which examination is required.

The committee believes that it would be well for the confederation to agree upon the branches upon which applicants should be examined to the end that uniformity of requirements by the various boards may be attained, and that the percentage required in each subject and the manner of conducting the examinations, together with the rules to be enforced in each examination, should all be uniform.

The committee urgently recommended that reciprocity between the examining boards of the country on all questions pertaining to the welfare of the public and the elevation of the profession be maintained. To this end there should be the fullest and freest communication between the boards which should not be limited to their official reports.

Some Vulnerable Points in Medical Legislation.

DR. HARVEY B. DALE, of Oshkosh, Wis., followed with this paper and stated that the ultimate intent of medical legislation is unquestionably good. Its motive is a laudable one. It aims to directly benefit suffering humanity, not to establish a doctors' trust, nor to stifle competition, nor to strangle any practical new idea or system of treatment in its infancy. Enforced unification of standards on the part of medical colleges would simplify matters. It would result in a diploma being generally recognized for what it purports to be—a certificate of actual fitness to practice medicine. It would enable the recognized graduate in one state to move into another at his own will. It would remove all injustice and hardship now endured, not always patiently, by qualified physicians. It would strike the Upas-tree at its root instead of lopping off its branches. It would do away with the manifest injustice to really qualified and honest college faculties, now inflicted by post-mortem dissections of their deliberate decisions. In a word, it would reduce the present complicated legislative machinery to a very simple and effective mechanism. Given a concise, yet comprehensive definition of what constitutes the practice of medicine, a uniform requirement that all who engage in such practice should have a medical diploma, and a legislative guarantee based upon actual information that such diploma says what it means, and means what it says, quackery would find life a burden in this country. The qualified physician of one state would be a qualified physician everywhere. The pretender might travel from Maine to California, and from California to Maine again, looking in vain for a chance to plunder the people.

How Should the Practice of Medicine be Legally Defined?

DR. HENRY BEATES, JR., of Philadelphia, read a paper presenting the following definitions for consideration:

To Practice Medicine: For anyone, except those carrying out the directions of the attending physician, to engage, directly or indirectly, habitually or occasionally, gratuitously, or for pecuniary or other compensation, in the care, management or treatment, by any means whatsoever, either material or immaterial, for the prevention, relief or cure of any or all diseases, accidents or disability to which human or animal life is exposed, threatened or afflicted.

Practitioner of Medicine: Anyone, except those carrying out the directions of the attending physician who engages, directly or indirectly, habitually or occasionally, gratuitously, etc., as above.

The Practice of Medicine: The engaging by anyone, except those carrying out the directions of the attending physician, directly or indirectly, habitually or occasionally, gratuitously, etc., as above.

The above definitions were only offered in the nature of suggestions. During a lengthy discussion the definitions were criticized, several modifications suggested, but no action taken by the confederation committing it to any particular definition.

Officers.

The following officers were elected for the ensuing year: President, Dr. N. R. Coleman, Columbus, Ohio; first vice-president, Dr. Henry Beates, Jr., Philadelphia; second vice-president, Dr. James A. Egan, Springfield, Ill.; secretary, treasurer, Dr. A. Walter Suiter, Herkimer, N. Y.; executive council, Dr. William S. Foster, Pittsburg; Dr. Joseph M. Mathews, Louisville; Dr. William A. Spurgeon, Muncie, Ind.; Dr. William Warren Potter, Buffalo, and Dr. Augustus Korndoerfer, Philadelphia.

PHILADELPHIA NEUROLOGICAL SOCIETY.

Regular Meeting.

Dr. Charles S. Potts in the chair.

Tea Intoxication with Spinal Symptoms.

DR. ALFRED GORDON presented the patient, a woman aged 31 years, who 7 years previously had had an operation performed for some condition of the uterus. Since that time she has been accustomed to taking enormous amounts of tea, sometimes 15 glasses a day. Her present illness seems to date back to three months ago, at which time she began to complain of fatigue and unsteadiness in walking. Increased knee-jerk and biceps tendon reflex were present. When the latter region was struck a distinct tremor could be produced in the hand. The sphincters had also been involved. Sensation was altered, and hyperesthesia was present over the lower extremities. The pupils of the eyes were unequal, with hypermetropia and nystagmus. There had been slight congestion of the optic disc. On standing with the eyes closed, there was unsteadiness with a swaying backwards and forwards, or from side to side. Some time ago she began to suffer from spells of unconsciousness lasting for a few moments. She now complains of heaviness of the legs. Nearly all the symptoms of unilateral sclerosis or hysteria are present. In this case it is believed that the spinal symptoms are due to tea intoxication. Cases of this kind do not seem to have received much attention during the past five years. It should be remembered also, that to color tea sometimes lead is used. It may be possible that some of the spinal symptoms existed previous to the time she began taking so much tea.

DR. D. J. M. MCCARTHY had seen a case treated by Dr. Charles W. Burr, in which as much as 10 glasses of tea a day had been taken. In this case the symptoms presented pointed towards sclerosis.

DR. H. A. HARE called attention to several cases of lead poisoning which had occurred at a certain institution,

and believed to have been caused by biting off and chewing the ends of black sewing thread. In these instances the thread had probably contained large quantities of lead. He also called attention to the fact that at the present time there was little if any caffein upon the market. That which is generally sold as caffein is really thein. Thein might produce different symptoms to that of caffein.

Trichiniasis.

DR. J. CHALMERS DACOSTA exhibited an interesting case of trichiniasis occurring in his service at the St. Joseph's Hospital. The history of this case was read by Dr. Dorsett as follows: The patient was a man of 20 years who, when admitted to the hospital, was complaining of pain in calf of the right leg. The patient stated that last summer while on a bicycle trip he had sustained an injury to the right leg, which caused bleeding. A short time later the right leg began to swell, and it became painful, worse generally at night. An operation had been performed by Dr. DaCosta and a small piece of a muscle of leg removed. The microscopic findings in this case were given by Dr. Randle C. Rosenberger as follows: The specimen had been fixed in osmic acid and showed in specimens trichiniasis present. In one microscopic field as many as 18 specimens had been found, in some of which obliteration of the fibrous capsule was found. The blood count showed hemoglobin 48 per cent., red corpuscles 4,800,000, and the leukocytes 12,000, eosinophiles 4 per cent. Eight days later the hemoglobin was 80 per cent., red cells 4,275,000, leukocytes 17,600, eosinophiles 3 per cent. Dr. Dacosta then detailed the symptoms existing, and noted especially that the disease was confined to the right lower extremity and seemed to only extend up as far as the thigh, the rest of the body appearing to be free of disease. The right leg was enlarged and each muscle stood out. On palpation over the enlarged portions the consistency was like that of rubber. He was free to confess that the diagnosis could not be made from the clinical symptoms. Trichiniasis had been considered, but had been excluded by himself and other colleagues.

Severe Anemia with Changes in the Spinal Cord.

DRS WM. E. HUGHES and WM. G. SPILLER reported a case of this kind. Dr. Hughes in detailing the cases stated that the patient had been 63 years of age with previous negative history. Five years ago he had suffered from a mild case of sunstroke, from which he recovered. When seen there was some puffiness of the eyelid, slow, full pulse, and systolic cardiac murmur transmitted into the axilla. Some crackling râles were also present. The eyesight was almost totally destroyed. Urine was normal. The red corpuscles had numbered 780,000, and the hemoglobin was 26 per cent. Normoblasts and megaloblasts were present. The temperature had remained practically normal. Dr. Spiller stated that sclerosis was never pronounced in the upper portions of the lateral columns in these cases. In this instance the anterior and posterior roots were not degenerated. Taylor, in 5 cases examined, had found alterations of the blood vessels in two instances, but no general arteriosclerosis. Drawings were then passed around showing the changes found in the cord.

DR. J. HENDRIE LLOYD was much interested in these changes found in the cord. It might be that they were produced by toxins circulating in the blood. As to ascending degeneration, he had seen the condition occur in a case of syringomyelia.

DR. CHARLES W. BURR had studied 7 cases of pernicious anemia with spinal cord symptoms. In these instances alterations had been found mostly in the posterior regions of the cord. He was confident that without visual changes in the cord, symptoms referable to the cord might exist, and it was his opinion that the condition which gives rise to the changes in the blood also produced the changes in the cord.

DR. CHARLES K. MILLS believed that it would be best to designate these cases "acute toxemia" rather than pernicious anemia.

Secondary Suture of Posterior Interosseous Nerve.

DR. W. W. KEEN read a paper entitled "Report of a case of secondary suture of the posterior interosseous nerve, with complete restoration of function. The speaker believed that this case was the first one of its kind on record, since a thorough search in the surgeon-general's office and elsewhere had not revealed a similar case. The history was as follows: The man, while cutting down a tree, accidentally dislodged the axe, which struck him in the forearm and completely separated the interosseous nerve. The wound was bandaged without uniting the ends of the nerve, and healed promptly. It appeared that the ulnar and radial nerves were not injured. Dr. Wharton Sinkler had made an examination and noted the condition. Three months after the accident Dr. Keen made an incision over the seat of injury and had found the two ends of the nerve. The tip ends of the two were cut away, after which they were united, and within eight days sensation returned, and two months later complete recovery occurred. The speaker also detailed a case in which he had united the cut ends of the radial and ulnar nerves with recovery of function.

NEW YORK COUNTY MEDICAL ASSOCIATION.

Stated Meeting, May 20, 1901.

The president, Dr. Parker Syms, in the chair.

Prostate Removed by Perineal Prostatectomy.

DR. PARKER SYMS presented this specimen, removed by operation on Jan. 24, 1901, from a man of 62 years. His method consists in doing away with the suprapubic incision, and by the use of a rubber inflatable bulb and drainage tube so controlling the prostate that it can be readily enucleated. He had operated on nine cases in this way without any mortality, and with complete restoration of the function of the bladder, save in one instance. He commended this operation because of its freedom from danger.

DR. J. W. S. GOULEY said that he had always been opposed to the use of a suprapubic incision in these cases, believing it to be a needless complication.

The Vaginal Compared with the Abdominal Route in Surgical Treatment of Pelvic Diseases.

DR. J. RIDDLE GOFFE presented a paper on this subject. He advised the vaginal route in all cases in which it could be used with equal safety and success as abdominal section, because it insured a more rapid convalescence and freedom from hernia. He considered vaginal hysterectomy to be the only operation for cancer of the body of the uterus. The vaginal operation was appropriate for all simple ovarian cysts, no matter what their size, because after being tapped and allowed to collapse they could be easily removed. Retroversion of the uterus, being a condition which would not justify a dangerous operation, should be treated by operation through the vagina. Alexander's operation was very liable to be attended by infection, or followed by hernia, and was absolutely contraindicated when the retroversion was complicated by disease of the appendages or by the presence of adhesions. While ventral fixation would certainly cure retroversion, it necessitated an abdominal section, with the attendant weakening of the abdominal wall and tendency to hernia. Through the vaginal incision the malposition of the uterus could be rectified and the round ligaments shortened. Most of his vaginal work was done through the anterior fornix, and in order to secure the necessary space he makes a longitudinal incision as well as a transverse one. Myomectomy for tumors which do not reach above the true pelvis was perfectly feasible through the vagina; larger ones were best treated by abdominal section.

DR. WILLIAM R. PRYOR thought vaginal hysterectomy for cancer of the uterine body was an absolute failure, but he had found it possible to relieve a very large percentage of the women coming to him with fibroids by operating through the vagina. He preferred to make the incision in the posterior cul-de-sac, not only because it inflicted less traumatism but because better drainage was thereby secured. As he believed fibroids were connected with a diathesis, and that if operated upon at all they should all be removed most thoroughly; he did not favor myomectomy. The most important advantage of the vaginal route was the opportunity it offered for making exploratory incisions without detriment to the patient.

DR. A. BROTHERS said that he had done about one hundred by each of the routes under discussion, and as a result of this experience was inclined to think that operations done through the vagina were rather difficult, and should not be undertaken by other than experts. They must necessarily be done in a narrow space and in a field more or less obscured by blood. He did not consider the vaginal route the one of election in most cases of suppurative disease in the pelvis.

DR. EDEN V. DELPHEY remarked that the mere opening of the abdomen was attended by far more shock than an incision through the vagina.

Penetrating Gunshot Wound of the Abdomen without Injury to the Abdominal Contents.

DR. HENRY ROTH in this paper briefly reviewed the literature, and reported a case of this kind coming under his observation in the hospital service of Dr. Parker Syms. His patient was a boy of 10 years, who had accidentally shot himself in the abdomen near the umbilicus with a revolver. On admission to hospital the next day he had had a temperature of 100.6 F., a pulse of 100, and 22 respirations per minute. An exploration of the abdominal wound had been made under ether, and a perforation discovered in the peritoneum, but the most diligent search had failed to show any wound of the abdominal contents. The boy did well and was about to be discharged, when a small swelling under the skin of the abdomen, about six inches to the left of the bullet wound, had attracted attention, and had proved to be the bullet. This was readily extracted. The speaker went on to say, that in civil surgery it was the rule that a bullet wound of the abdomen should be carefully explored as soon as possible, and after all preparations had been made for a laparotomy. The experience gained in the late Spanish-American war demonstrated that a large number of persons with gunshot wounds of the abdomen had recovered without operation, but it must not be forgotten that the large proportion of those so injured died on the field.

DR. J. W. S. GOULEY said that he had seen in a dissecting-room subject a bullet incysted in the mesentery without any evidence of injury to the coils of intestine.

DR. A. ERNEST GALLANT said that it had been his experience that the gunshot wounds that do badly are, as a rule, those which have been subjected to a good deal of previous probing. Abstaining from such interference, and the prompt application of antiseptic dressing would best promote quick and satisfactory healing.

OHIO STATE MEDICAL SOCIETY.

The Fifty-sixth Annual Meeting, held in Cincinnati, May 8-10, 1901.

The president, Dr. Frank W. Bain, of Kenton, in the chair.

DR. E. GUSTAVE ZINKE, chairman of the Committee of Arrangements, made the address of welcome; Dr. Bain responding. After the nominating committee had been named, the society proceeded with the reading of the papers.

At the conclusion of the afternoon session a letter was read from the Dayton Academy of Medicine asking that that society be made an auxiliary of the State Society; another letter was read from the Ohio State Pediatric Society asking that their organization be absorbed by the state society.

Limitations of Medical Therapeutics.

DR. FRANK BILLINGS delivered the address in medicine entitled as above, during the evening session. He stated that therapeutics had not shown the rapid advances of late years that had been made by her sisters, pathology and medical diagnosis. The practitioners of to-day, as far as the treatment of disease is concerned, could be divided into three classes: The therapeutic nihilist, who sees no virtue in any drug; the theorist, who treats diseases and not individuals; the rationalist, who bases his practice of therapy upon scientific knowledge with an ability to diagnose disease. In his closing remarks, the essayist spoke strongly against the use of drugs with copyrighted names, and inferred that the major portion of the sick could be more quickly benefited by a close adherence to sanitary laws in food, clothing and general surroundings than by drenching with medicines.

DR. C. A. L. REED, president of the AMERICAN MEDICAL ASSOCIATION, held a gynecological clinic at the Cincinnati Hospital on the second day.

The following officers were elected for the ensuing year: President, Dr. E. C. Brush, of Zanesville; first vice-president, Dr. E. Gustave Zinke, of Cincinnati; second vice-president, Dr. S. S. Halderman, of Portsmouth; third vice-president, Dr. J. C. M. Floyd, of Steubenville; fourth vice-president, Dr. W. S. Philips, of Belle Center; treasurer, Dr. J. A. Duncan, of Toledo; secretary, Dr. P. Max Foshay, of Cleveland. Dr. Foshay was also appointed editor of medical literature. The following committees were appointed: Finance, Dr. J. C. Oliver, of Cincinnati; ethics, Dr. F. W. Blake, of Columbus; publication, Dr. J. Snodgrass, of Kenton;; legislation, L. B. Tuckerman, of Cleveland, and T. C. Martin, of Cleveland; admissions and medical societies, Dr. T. M. Wright, of Troy.

DR. JOHN A. WYETH, of New York, delivered, during the afternoon session, the address in surgery: "A Surgical Operation."

The annual banquet of the society was held at the Phoenix Club, about three hundred physicians attending. Dr. Dan Millikin, of Hamilton, acted as toastmaster and addresses were given by the following: "Influence of the Physician in Public Affairs," by Dr. E. C. Brush; "Medical Legislation," by Dr. L. B. Tuckerman; "The Lawyer and the Doctor," by Judge Moses F. Wilson; "American Medicine," by Dr. C. A. L. Reed; "Social Amenities of Medical Societies," by Dr. W. C. Chapman; "Meditations on a Well Spent Life," by Dr. Thad A. Reamy.

The meeting was a success in every way, one of the unusual features being that with but three or four exceptions the papers were read as advertised. The next meeting of the society will be held in Toledo next May.

The following resolutions were adopted:

Whereas, The enormous increase in the Membership of the AMERICAN MEDICAL ASSOCIATION renders it increasingly difficult to transact the necessary legislative work of the Association in the General Sessions,

Resolved, That we recommend that the delegates of the Ohio State Medical Society use their best endeavor to secure such an amendment to the Constitution of the AMERICAN MEDICAL ASSOCIATION as shall transfer the business of the ASSOCIATION to a special section so constituted as to fairly represent the several State Societies, and the scientific Sections, and small enough to properly transact the business.

AMERICAN ACADEMY OF MEDICINE.

Twenty-sixth Annual Meeting, held at St. Paul, Minn., June 1-3, 1901.

(Continued from page 1654.)

SECOND DAY.

Abuses of Institutionalism.

DR. EUGENE G. CARPENTER, of Columbus, stated in regard to institutionalism that it is an outgrowth of organization and is the result of routinism. Routinism, it was declared, develops perfunctoryism, which in turn leads to automatism, differing little from that which is mechanical. That which is mechanical moves in fixed lines, and is consequently opposed to progress. Too often the institutionalist is dominated by the institution. The true institutionalist, however, remains the master of the institution. The executive of the institution sets the pace for the other participants of the organization. The policy, therefore, should be broad and liberal.

Advantage of Civil Service Principles in the Conduct of State Hospitals for the Insane.

DR. GERSHOM H. HILL, superintendent of the Iowa State Hospital for the Insane, in this paper treated of the benefits resulting from the system and underlying principles in having a board of three in control of the state institutions of Iowa, in practice two and a half years. It was shown that the system was free from political influence. A careful supervision is had over the expenses of supplies. In the hospital under Dr. Hill's supervision, the personal element in the

treatment of patients is preserved, and there is no interference with individually approved ways of treating patients. A medical society is held in connection with the hospital, scientific papers are read and discussed and a quarterly bulletin published. Contributions are solicited from other institution men in Iowa and other states. Solicitation on the part of the board for the selection of an employe is counted a misdemeanor. It is the distinction of the board of control law to do the business of the state institutions on the same principles and methods used by the United States Government in buying supplies or by the up-to-date business man. The tendency is for the legislature to trust the board of control, to adopt their recommendations and to appropriate all the money asked for as the resources of the state will permit. Merit is the criterion in selecting help. The result under these civil service rules is to secure perfection as nearly as possible.

Need of National Co-operation in the Establishment of Sanatoria for Tuberculosis.

DR. A. MANSFIELD HOLMES, of Denver, detailed the advantages of sanatoria in that they increase the chances of recovery, afford an opportunity for rigid sanitary regulations among patients, and furnish a means of educating those infected, and the public, against sources of infection. He divided the varieties of sanatoria into three classifications: for patients of limited means; for those of moderate means, and for the well-to-do. The methods of conducting sanatoria were outlined under the purely charitable institutions; coöperative institutions, and those conducted for profit. In considering the location of the sanatoria, there should be for the incurable cases sanatoria located near large centers of population regardless of climatic conditions; for the incipient cases the most favorable climatic conditions should be chosen for the location of the sanatoria. Coöperative sanatoria established on the proper plan would, in the author's opinion, overcome many of the present difficulties.

Evils in Institutions.

DR. ALBERT GOLDSPOHN, of Chicago, spoke on "Evils in some Asylums, Hospitals, Infirmaries and Training Schools for Nurses that might be avoided by placing them under Civil Service Rules, and by Proper Requirements, Regulations and Inspections on the part of a properly constituted and authorized Board of Health in each State," contending that many of these institutions did not yield their intended degree of usefulness because of too exclusively lay management and lay selection and appointment of medical men, which very frequently resulted in the appointment of inferior men. A still greater evil frequently occurred in the public hospitals and asylums that were under political influence. Many governors, county commissioners, etc., regarded medical appointments, like all others, as something with which they had a right to reward their political henchmen, who among physicians were generally of an inferior grade professionally. He advocated giving the state boards of health the additional duties, powers and emoluments of a medical civil service board; that this board should select and submit all the candidates for political medical appointments; that it should oblige laymen trustees of private or denominational hospitals, etc., to have their candidates for medical positions selected by some creditable local medical society; that it should determine the fitness of all superintendents and matrons of hospitals and license them for such positions, and that a representation of such a board should examine or inspect every such institution at least once a year.

Hospitals and Sanatoria Founded, Owned and Controlled by the Medical Profession.

DR. H. BERT ELLIS, of Los Angeles, stated that hospitals may be divided into three broad classifications: charitable, private, and hybrid class where private wards and free beds are mingled for the pecuniary gain of the hospital. The description of a hospital owned and controlled by physicians is given. It is the outgrowth of a corporation known as the California Hospital Company. The first building erected for the hospital was soon found to be inadequate, and was added to. At present the hospital owns a corner property 323 by 185½ feet. Patients select any reputable physician and pay him for services. Every physician prescribes for and operates upon his patients as if in the patient's own home, and prescriptions are filled at the drug store. Connected with the hospital is a training school for nurses. The absolute management of the hospital is vested in a board of nine directors, elected annually from among the stockholders. The plan of the management is recommended to Eastern confrères because the construction of the building and the hospital service are entirely in accord with the desires of the physicians; patients realize that they are in a hospital controlled and partially owned by their own physician, which insures confidence; and whatever profits accrue from the hospital revert to the physician, thus giving safe investments. In the opinion of Dr. Ellis it is as essential that the profession own and control the hospitals and sanatoria as that they should own and control their medical journals in order to keep them as free as possible from commercialism.

A Suppressed Educational Problem.

DR. JAMES L. TAYLOR, of Wheelersburg, Ohio, urged in this contribution an enlightened "natural selection" in lieu of the ignorant, haphazard methods of selection among people, which result so generally in physical as well as intellectual deterioration.

The Relation of the Clinical Laboratory to Its Hospital.

DR. HENRY W. CATTELL, of Philadelphia, presented a paper under this title, in which he takes for granted that the time has gone by when it is necessary to argue for the existence of a clinical laboratory in connection with a hospital. The questions to be considered in the internal administration of a hospital are the relations of the clinical laboratory to the board of managers, the medical and surgical staff, the chief resident physician, the resident physicians, the superintendent, the nurses, the out-patient department, etc. Questions such as these should be asked, discussed and answered. How shall the laboratory be built, equipped and conducted? Shall there be a laboratory attached to each ward, a general laboratory, or a combination of both? Shall the director and his assistants be paid for their work? What relations shall exist between the laboratory worker and the clinician. What are the usual causes of friction arising from the new state of affairs? Should the members of the staff be expected to bring urine, sputum, blood, etc., of their pay patients both in and out of the hospital and make the laboratory make these examinations free of charge? Shall original investigations be carried on in such laboratories? Shall the workers in the laboratory be permitted to perform and to charge for work received from their own patients or from those desiring such services for money?

From a personal experience extending over a period of twelve years, and from an intimate connection with a number of hospitals in various capacities, Dr. Cattell gives his personal views in regard to the answers to some of these questions.

DR. W. W. KEEN, of Philadelphia, said he was glad indeed to have heard the paper of Dr. Cattell. He was less interested, perhaps, in the clinical laboratory from the administrative point of view than from the scientific and surgical. He emphasized the statement that it was granted that at the present time every hospital, small and large, should have a clinical laboratory, and more than that, such a laboratory finds a large field of usefulness, which in ten or twenty years would be doubled or even tripled.

Necessity for Revising Medical Fees.

DR. P. MAXWELL FOSHAY, of Cleveland, stated that the custom of charging a fixed sum for each visit was a relic of antiquity and illogical. Other callings are differently regulated, as is also the special practice in the profession. The author thinks there is every reason in the world for the general practitioner to proportion his charge in all cases to the value of the service rendered and to the ability of his patient to pay. The need of a "fee-bill" is stated to establish a standard agreed upon by physicians in their societies to which the profession can appeal when dealing with patients. This also is

of definite service in court when suing to recover the amount of a bill.

A greater object urged for this new method is its means of checking to some extent the pernicious custom of giving "commissions." No present retrogressive tendency in the evolution of the medical profession is at present so strong as this of the physician dividing fees behind the patient's back.

Refraction.

DR. JAMES A. SPALDING, of Portland, Me., gave a personal experience of an ophthalmologist suffering from a sudden loss of vision and consulting first the optician and then the oculist for aid, showing the inefficiency of the former and the great help which the latter gave to him. In view of this Dr. Spalding asks, would it not be preferable for the profession to address the public through the public press regarding all sorts of ailments, thereby preventing them accepting the beguilements of charlatans. Physicians, too, ought to be careful in referring their patients only to those who have a proper knowledge of disease. An increase in the solidarity of the profession is needed.

DR. TUCKERMAN, of Cleveland, and DR. RISLEY, of Philadelphia, referred to cases in which grievous damage had been done through failure of the patients to be referred to an oculist rather than to the advertising optician.

Election of Officers.

The following new officers were elected: President, Prof. V. C. Vaughan; first vice-president, Dr. James L. Taylor, of Wheelersburg, Ohio; second vice-president, Dr. W. A.. N. Dorland, of Philadelphia; third vice-president, Dr. H. P. Ritchie, of St. Paul; 4th vice-president, Dr. H. Bert Ellis, of Los Angeles, Cal.; secretary and treasurer, Dr. Charles McIntire, of Easton; and assistant secretary, Dr. A. R. Craig, of Columbia, Pa.

Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns.]

Bromidrosis (Offensive Sweating).

Bromidrosis is usually confined to the axillæ or to the soles of the feet. This form of sweating generally occurs in patients who demand tonic treatment. When there is much sweating the following formula is recommended:

℞. Acidi sulphurici arom. ..... ℥vi 24
Aquæ q. s. ad ..... ℥iv 128
M. Sig.: One teaspoonful in wineglassful of water three times a day.

The following is advised by Crocker:

℞. Pulv. cretæ comp. ..... ℥vi 24
Pulv. cinnamomi comp. ..... ℥ii 8
Sulphuris præcip. ..... ℥i 32
M. Sig.: One teaspoonful to be taken twice a day.

Treatment of Favus.

Dr. E. H. Moore states that when the patches are scattered it is advantageous to practice thorough epilation. The patches should be kept saturated for one or two days with oil of ergot, and then thoroughly sponged with a 25 per cent. solution of boroglycerid. In one or two hours the crusts will peel off, leaving a clean surface. If a discharge is present after removal of the crusts, the scalp should be cleansed with hot borax water, dried with a towel, and then rubbed with the following ointment:

℞. Cupri oleatis ..... ℥ss 2
Vaselini ..... ℥i 32
M. Sig.: To be well rubbed into the patches.

A diluted tincture of iodin may also be used. The surface must be kept clear of crusts, and the treatment is to be repeated until all the parasites have been destroyed. When favus affects the body or limbs, it can be easily removed by a few applications of the following:

℞. Tinct. iodi
Alcoholis, āā ..... ℥i 32
M. Apply locally to the affected parts.

Hyperidrosis.

The treatment of hyperidrosis must vary with the cause. Local treatment in the milder forms of hyperidrosis is of great use, and in many cases is all that may be required. While insisting upon the treatment of the general condition, the following prescriptions may be found useful, as recommended by Van Harlingen in "Twentieth Cent. Practice":

℞. Pulv. acidi salicylici
Pulv. zinci carb. præcip.
Pulv. magnesiæ ustæ ..... ℥iv 16
Pulv. amyli ..... ℥xv 60
Pulv. cretæ ..... ℥xx 80
M. Sig.: For local application.

AS A LOTION.

℞. Acidi tannici ..... ℥i 32
Alcoholis ..... ℥viii 256
M. Sig.: Use as a lotion.

In hyperidrosis of the palms and soles he recommends washing them in carbolized solution, after which the following should be applied:

℞. Unguenti picis (U. S. P.)
Unguenti sulphuris (U. S. P.), āā ..... ℥ss 16
M. Sig.: Spread upon cloths and keep in place with a bandage.

The following is recommended by Hebra in obstinate sweating of the soles of the feet:

℞. Emplast. diachyli
Olei olivæ, āā ..... ℥ii 64
M. Sig.: Apply as an ointment after cleansing.

A formula similar to the following is recommended by Ishoppe in bromidrosis of the axilla:

℞. Zinci sulphatis
Ferri sulphatis, āā ..... ℥ii 64
Cupri sulphatis ..... ℥vi 24
Beta naphthol ..... gr. iv 25
Essentiæ thymi ..... m. x 66
Acidi hypophosphorici ..... gr. v 30
Aq. destil ..... O i 512
M. Sig.: Apply locally as a lotion.

The following has been recommended as one of the most efficient powders in hyperidrosis of the feet:

℞. Acidi salicylici ..... gr. lxxv 5
Acidi boracici ..... ℥iiss 10
Acidi tartarici ..... ℥iiss 10
Zinci oxidi ..... ℥vi 24
Talc. præp. ..... ℥iss 48
M. Sig.: Wash the feet with medicinal soap, and dust the powder into the stockings in the morning before drawing them on.

The *Medical Press* recommends the following in hyperidrosis of the feet:

℞. Menthol ..... gr. v 30
Acidi salicylici ..... gr. xv 1
Acidi thymi ..... gr. xv 1
Spts. lavendulæ ..... ℥vi 192
M. Sig.: Wash the parts well, dry, and bathe well with the lotion.

AS AN ANTISEPTIC ASTRINGENT.

℞. Acidi salicylici ..... gr. xv 1
Sodii biboratis ..... gr. lxxv 5
Zinci oxidi
Talc. præparatæ, āā ..... ℥iss 48
M. Ft. pulvis. Sig.: Sponge the parts well and apply the powder.
Or:
℞. Salol ..... gr. lxxv 5
Aluminis ..... gr. lxxv 5
Zinci oxidi ..... ℥i 32
Talc. præparatæ ..... ℥ii 64
M. Sig.: Apply locally.

To Prevent Insect Bites.

Meuse, in *Pharm. Jour.*, states that a solution of quinin sulphate in glycerin is the best preventive against insect bites. Whether this is due to the bitter taste of the quinin or to its toxic action on the insects has not been established.

Nitrites in Brain Syphilis.

Dr. W. Browning, in *Med. News*, states that the nitrites, being the most powerful vasodilators, are of great benefit in overcoming the tendency to the narrowing of the lumen of arteries, especially in disease of the arteries supplying the brain. After the vessels are dilated, specific medication has a much better opportunity to gain access to the diseased parts. He also finds the nitrites of value in diabetes of old syphilitics in conjunction with specific treatment. He prefers to administer them by the mouth rather than hypodermically.

Treatment of Asthma.

Jackson, in *Merck's Archives*, recommends the following, to be inhaled, to check the attacks of paroxysmal dyspnea:

R.	Pulv. pot. nitratis	℥v	20
	Pulv. stramonii	gr. lxxv	5
	Pulv. lobeliæ	℥iss	6
	Pulv. belladonnæ	gr. xlv	3
	Pulv. grindeliæ	℥iss	6
	Pulv. hydrastis canad.	gr. xv	1

M. Sig.: Burn one teaspoonful in a small closed room, and inhale the smoke.

Sodium Salicylate in Gonorrheal Epididymitis.

The internal administration of sodium salicylate is recommended by Pigot, in the *Ann. de Derm. et de Syph.*, in those cases in which there is much pain, without extensive involvement of the spermatic cord and tunica vaginalis. When the cord is involved, belladonna and mercurial ointment is more effective.

Urticaria.

The following combinations are recommended by *Ther. Gaz.* in the itching of urticaria:

R.	Liq. hamamelidis	℥ii	64
	Salis maris	℥ss	16
	Aq. destil	O i	512

M. Apply locally.

Or:

R.	Adipis benzoinatis	℥iv	128
	Ceræ albæ	℥ss	16
	Cetacei	℥i	4
	Acidi borici	℥ss	2
	Glycerini	℥i	4
	Aq. Coloniensis	℥iiss	80

M. Sig. For local application.

In rheumatic subjects the following is of value taken internally:

R.	Sodii salicyl.		
	Potass. bicarb., āā	℥iv	16
	Aq. menth. pip. q. s. ad	℥iii	96

M. Sig.: One teaspoonful after meals in water.

The following is recommended by *Merck's Archives* as a local application:

R.	Acidi carbol.	gr. xv	1
	Spts. menthæ pip.	m. xv	1
	Zinci oxidi	℥iii	12
	Lani	℥iss	48
	Vaselini	℥i	32

M. Sig.: Apply locally.

Or:

R.	Menthol	℥ii	8
	Spts. etheris		
	Spts. chloroformi		
	Spts. camphoræ, āā	℥vi	24

M. Sig.: Spray the affected part and dust with zinc oxid powder.

Saline Baths in Disturbances of the Menopause.

Gottschalk, as noted in *Brit. Gyn. Journal*, advocates the employment of hot saline baths at a temperature of 40 C., lasting for about twenty minutes, to be taken every evening at bedtime, as an excellent means of combating the night attacks of heat and sweating from which many women are troubled at time of change of life.

Medicolegal.

Seven Thousand Dollars for Death of Woman.—The fourth appellate division of the Supreme Court of New York holds, in the case of Smith vs. the Lehigh Valley Railroad Company, where a woman 49 years old was killed by a train, and she left a husband 48 years old, and two sons, 21 and 18 years of age, respectively, who were entitled to share the verdict, that a verdict for $10,000 damages was excessive, and should be reduced to $7000, or a new trial would be granted.

Sufficient to Support Verdict Against Firm.—In the case of Till vs. Redus, where it appeared that near the place a firm conducted a store one member of the firm operated a gin in which an employe of his got caught and was so badly injured as to require the amputation of an arm, and the man who telephoned for a surgeon testified that both members of the firm directed him to say that the firm wanted him to attend the wounded man, the Supreme Court of Mississippi holds that this testimony offered a sufficient foundation for placing the surgeon's claim against the firm for services before the jury, and of supporting a verdict in his behalf.

Attending Physician on Mental Condition of Testator.—The Supreme Court of California says that under section 1881 of the Code of Civil Procedure of that state a physician is precluded from being examined as a witness only as to the information acquired in attending the patient which was necessary to enable him to prescribe or act for the patient. Consequently, it holds, In re Black's Estate, where it clearly appeared that the testimony of the physicians as to the mental condition of the maker of the will which was being contested was not founded upon any such information, that their testimony was not improperly admitted although they had attended the testatrix professionally.

Rebuilding and Enlargement of Hospital Permitted.—In construing the act of 1899 prohibiting the establishment or maintenance of additional hospitals in the built-up portions of cities, the Supreme Court of Pennsylvania held, in a decision reported on page 685 of THE JOURNAL of March 9, 1901, that the word "additional" referred to new buildings not already established, and did not mean in addition to the total number then maintained in the whole of the city. But, in another decision, in the case of Commonwealth vs. the Charity Hospital of the City of Pittsburg, the court now holds that, under that act, not only may an existing hospital building be torn down and a new one constructed upon the same site, but that there may also be erected a larger building, so long as that is done in the location in which the hospital was maintained prior to the passage of the act.

Competent to Testify as an Expert on Insanity.—A physician called as a witness in the murder case of the State of Washington vs. Boyce said that he did not like the word "expert"; did not like to call himself an expert. On the other hand, he said that he considered himself enough of an expert on insanity to examine people, had even deprived them of their liberty in an asylum by his knowledge of insanity, and that he had done it a great many times, but that he was not a specialist on insanity. And his whole testimony showed that he drew a distinction between an expert and a specialist. In other words, while in the first part of his testimony he would not say that he was an expert, saying that he did not like the word "expert," he did say that he was competent to testify as an expert. The testimony, as a whole, the Supreme Court of Washington holds, did not show that he was not competent to testify as an expert.

Sufficiency of Proofs of Cause of Physician's Death.—A policy of accident insurance issued to a physician contained the following clause: "This policy covers septic poisoning resulting

from accidental incision or abrasion of the cuticle, and the simultaneous infection thereof, while the insured is performing a surgical operation or autopsy." It was conceded that the testimony produced at the trial was sufficient to sustain a finding by the jury that the insured died of septic poisoning, which resulted from an accidental abrasion of the cuticle while performing a surgical operation, and that the facts proved established a claim within the meaning of the policy. But it was contended that the proofs of death furnished the company were not in substantial compliance with the requirements of the policy. The Supreme Court of Pennsylvania says, however, case of Braymer vs. the Commercial Mutual Accident Company, that the only defect in the proofs which the most critical examination developed was that they did not show that the abrasion of the skin which made infection possible occurred during the operation, which objection was not raised, the only objection stated being that it did not appear that infection occurred during the performance of the operation, which objection was not well founded. Under these circumstances, the court holds the proofs sufficient, as it thinks it might well be inferred from but the one objection last mentioned being raised that in all other respects the proofs were accepted as sufficient.

Five Thousand Dollars for Injuries to Foot and Leg.—In the personal injury case of Perrette vs. the City of Kansas City, the former caught his foot in a hole in a sidewalk, was thrown upon the walk, his leg broken, the ligaments of his foot and ankle sprained and lacerated, and the bones of his foot and ankle dislocated. Bandages and splints were first applied, the swelling being so great that a plaster of Paris cast could not be put on. The inflammation around the injured parts became so great that gangrene set in, and he was compelled to keep his foot in ice water four or five days, during which time he suffered intense pain and was unable to sleep, except under the influence of opiates. A plaster of Paris cast was afterwards applied, which remained on about 40 days, and he was altogether confined to his bed 90 days, suffering constant pain and inability to sleep, while up to the time of the trial, which occurred nearly 14 months after the accident, he had not been able to stand. The reason of this result the physicians considered largely due to the tearing loose of the ligaments and to the displacing of the heel bone where it united with the bones of the foot, which had caused the axis of the foot and ankle to become perverted, the ankle to give way or turn out, and the arch of the foot to be destroyed, making a "flat foot," which condition they pronounced permanent. Under these circumstances, the man being 49 years of age, and earning about $21 a week, at a trade which required him to stand, when he met with the accident, the Supreme Court of Missouri, Division No. 2, does not think a verdict in his favor for $5000 excessive.

Malpractice Liability—Expert and X-Ray Evidence.—The physician sued in the malpractice case of Miller vs. Dumon, in which the Supreme Court of Washington has affirmed a judgment against him, was called in to examine an injury which the other party had sustained in an accident ten or twelve days before, which had been pronounced a fracture of the tibia of the left leg, by another physician, who had been attending him. As to what occurred during this visit, further than that he told the party that there was no fracture of the bones of the leg, but that he was suffering from a severe sprain, there was a square contradiction in the evidence. On the one hand, it was contended that he undertook the treatment of the injury, while he, on the other hand, denied it. At any rate, however, as a result of this visit, the physician first called was dismissed, the man got out of bed, procured crutches, undertook to use the injured limb, and, while so doing, the leg gave way in some manner, causing him much pain and suffering, and compelling him to retake to his bed, when he sent for the defendant, who, for some reason, did not answer the call, and the physician previously employed was recalled, and the final result of the whole matter was a permanent injury to the leg. Now, the court says that it may be that the weight of the professional testimony was to the effect that there had been no fracture of the bones of the injured limb, but the evidence was contradictory, and there was substantial testimony the other way, sufficient of itself to support the verdict of the jury for the party suing, in which case the verdict must stand. Then, the jury was instructed that, in order for him to recover damages, it must be satisfied by a preponderance of the evidence that his leg was in fact broken, and that the defendant, acting as a physician and surgeon, unskillfully and negligently treated the broken leg. Besides, it was instructed that the fact that a physician responds to a call for his professional services does not necessarily constitute an employment, unless some act is done or advice given by the physician which indicates an intention on his part to enter upon the employment. He may absolutely refuse this employment, if he sees fit. But when any act is done, or advice given, that may reasonably be construed into indicating an active entering upon the employment, then the liability of the physician attaches, and he may be held responsible for his negligence or lack of skill. These instructions, the court thinks, sufficiently covered the point that the physician sued contended that he had never undertaken to treat the injured limb, by way of directing the jury's attention thereto. The court further holds that a witness who has qualified as a physician and surgeon not only familiar with fractures, but with the *x*-ray process of determining whether a fracture has ever existed, is an expert as much qualified to express his opinion from an examination made by means of an *x*-ray negative taken by himself as are experts who make their examinations by means more commonly used by the medical profession. The method of examination does not affect the competency of his testimony. How much it affects its weight is entirely a question for the jury. Nor does the court think the introduction in evidence of the negative itself objectionable, it being shown to have been taken by an approved process and an approved apparatus, and the witness having testified to its being a correct representation of the bones of the leg. An *x*-ray photograph, it holds, is admissible as evidence when verified by proof that it is a true representation of an object which is the subject of inquiry.

Current Medical Literature

Titles marked with an asterisk (*) are noted below.

Medical Record (N.Y.), June 1.

1 *The Diagnosis and Surgical Treatment of Prolapsed Kidney; with Demonstration of a Simple Method of Examination for its Detection. Augustin H. Goelet.
2 The Climate of Long Island. Le Grand N. Denslow.
3 Superheated Air in the Therapeutics of Chronic Catarrhal Otitis Media. George W. Hopkins.
4 Three Cesarean Sections—Recovery. J. F. Baldwin.
5 *Ether as an Anesthetic. Edward Judson Wynkoop.
6 A Few Observations from the Lorenz Orthopedic Clinic. Leonard W. Ely.
7 A Case of Membranous Angina, Due to Streptococci, Followed by Paralysis of the Soft Palate. Moses Keschner.

Boston Medical and Surgical Journal, May 30.

8 *The Diagnosis and Surgical Treatment of Penal Tuberculosis. F. Tilden Brown.
9 Asthma. F. P. Emerson.
10 A Case of Trichinosis. George G. Sears.

New York Medical Journal, June 1.

11 *On Theories of Inheritance with Special Reference to the Inheritance of Acquired Conditions in Man. J. George Adami.
12 Appendicitis Perforativa in Irreducible Right Scrotal Hernia, with a Report of a Case. O. Thienhaus.
13 *Muscular Action of the Arteries. Andrew H. Smith.
14 Hyperacidity (Superacidity, Hyperchlorhydria, Superaciditas, Chlorhidrica); A Clinical Study. (Continued.) H. Illoway.
15 A Case of Sarcoma in the Muscles of the Right Shoulder, with Perforation into the Spinal Canal and Paraplegia. Leonard Weber.

Philadelphia Medical Journal, June 1.

16 Two Successful Cases of Secondary Suture, One of the Posterior Interosseous Nerve and One of the Median and Ulnar Nerves. W. W. Keen.
17 *Pancreatitis. A. W. Mayo Robson.
18 *The Examination of the Blood in Relation to Surgery of Scientific but often of no Practical Value, and may Misguide the Surgeon. John B. Deaver.

19 *Complicated Fractures, Their Diagnosis and Treatment. Thomas H. Manley.
20 *Pityriasis Versicolor, with Special Reference to Allen's Iodin Test. Jacob Sobel.
21 *Biceps Tendon-Jerk in Locomotor Ataxia. Moses Behrend.

Medical News (N. Y.), June 1.

22 *Some Factors Relating to the Etiology of Prostatic Enlargement. J. Bentley Squier.
23 Gastric Ulcer and Muco-Membranous Colitis at the Paris Congress. James J. Walsh.
24 *Streptococcus Bronchitis in Influenza. F. Forchheimer.
25 *Fourth-of-July Tetanus. H. Gideon Wells.
26 *The Use of Methylene Blue Injections in Pleurisy with Effusion. Charles H. Lewis.
27 *The Appearance of the Soft Palate a Pathognomonic Symptom of Epidemic Influenza. Louis Kolipinski.

American Medicine (Philadelphia), June 1.

28 *A Case of Antrum Infection and Sigmoid Sinus Thrombosis without present Middle-Ear Disease, Presenting the Symptoms of Facial Neuralgia and None of the Ordinary Symptoms of Disease in the Petrosa; Retropharyngeal Gravity Abscess, General Sinus Thrombosis without Much Impairment of Cerebration; Death after Three Months, Partial Autopsy, Presentation of Specimens. Bayard Holmes.
29 *Typhoid Fever and Pharyngeal Diphtheria. Morris Manges.
30 *Practical Thoughts on Pulmonary Tuberculosis. Howard S. Anders.
31 *The Recognition of Tabes Dorsalis. Theodore Diller.
32 Simplicity in Therapeutics. Edwin W. Pyle.
33 *The Radical Cure of Internal and External Piles by Excision. John A. Hawkins.
34 Rigidity of the Spine. (Spondylose Rhizomelique.) Max H. Bochroch.
35 Some Notes on a Case of Cerebral Embolism. Anna M. Littlefield.
36 Report of the General Hospital for the Treatment of Pulmonary Tuberculosis at Fort Bayard, N. M., for the Period Ended December 31, 1900. D. M. Appel.

Cincinnati Lancet-Clinic, June 1.

37 Valedictory Address, Miami Medical College. E. W. Mitchell.
38 House-to-House Operating. Edmund C. Brush.
39 Phlyctenular Conjunctivitis. S. C. Ayres.
40 *Fistula and Consumption. George J. Monroe.

Pediatrics (N. Y.), May 15.

41 Scarlet Fever. F. D. Millard.
42 Two Cases of Congenital Dilatation of the Colon. Theodore Fisher.
43 The Intra- and Extrauterine Periods of Stress as Pathologic Factors in Pediatry. James G. Kiernan.

Virginia Medical Semi-Monthly, April 26.

44 Endocardiopathies. Thomas E. Satterthwaite.
45 State Medicine. James Evans.
46 Intravenous Infusion of the Normal Salt Solution. Valentine Taliaferro.
47 The Significance of Running Ears. D. A. Kuyk.
48 Faradic Anesthesia, or Sedation and Galvanization Used Simultaneously. Alexander Irvine.

Merck's Archives (N. Y.), May.

49 Glonoin: Its Pharmacology, Physiologic Action, Toxicology, and Therapeutic Uses. H. Edwin Lewis.
50 Chats on Every-day Therapeutics. Solomon Solis-Cohen.
51 *The Use of Suprarenal Gland in Peritonsillar Abscess. Lewis S. Somers.
52 Three Well-known Drugs (Quinin, Iodin, Sodium Sulphate). Harvey J. Chadwick.
53 Sodium Bromid in the Vomiting of Pregnancy. J. J. Tribie

American Practitioner and News (Louisville, Ky.), April 15.

54 True Greatness. J. Frank Crawford.
55 Four Stab Wounds of the Abdomen. H. Horace Grant.
56 Cystitis. John R. Wathen.
57 Varicocele and its Radical Cure. Harry C. Weber.
58 A Singular Case of Insect Bite. T. B. Greenley.

Northwestern Lancet (Minneapolis), May 15.

59 The Present Status of the X-ray in Medicine and Surgery. J. E. Cross.
60 Some Cases of Lithemia. Mary Towers.
61 Leucocythemia and Pernicious Anemia in North Dakota. J. E. Engstad.

Maryland Medical Journal (Baltimore), May.

62 Pregnancy in a Double Uterus. L. M. Allen.
63 *Rabies and the Pasteur Preventive Treatment in Germany. John Ruhrah.
64 A Case of Tetanus Treated with Antitoxin. J. W. Humrichouse.
65 A Review of Some of the Recent Work on the Physiology and Pathology of the Blood. Thomas R. Brown.

Interstate Medical Journal (St. Louis, Mo.), May.

66 Clinical Lecture on Surgery. William L. Rodman.
67 Nephrectomy. C. E. Ruth.
68 The Eyes of Our School Children. Ellet O. Sisson.
69 The Practical Application of the X-ray in Fractures and Dislocations. J. Rudis-Jicinsky.

Medical Examiner and Practitioner (N.Y.), May.

70 The Savings to Life Insurance Companies from Medical Discrimination at the Home Office. Frank Sargent Grant.
71 *The Urine in its Bearing on Life Assurance. O. J. Kauffman.
72 *Marriage in Relation to Life Insurance. J. M. French.
73 *Death-Rate of the United States. J. E. Cowgill.
74 Latest Investigations on Uric Diathesis. Otto S. Binswanger.
75 Benefit to Brain and Body from Bicycling in Moderation. Frank S. Grant.

Indiana Medical Journal (Indianapolis), June.

76 The Radical Cure for Chronic Suppurative Otitis Media. L. C. Cline.
77 Report and Histological Study of a Case of So-called Pleurogenous Pneumonia. W. C. White.
78 Twins as Related to Obstetric Procedures. Hugh A. Cowing.
79 Nerve Resection as Applied to the Supra-orbital and Nasolachrymal Branches of the Fifth Pair. J. O. Stillson.
80 Pemphigus Vulgaris. George R. Green.
81 Formaldehyde Poisoning. James Wellborn.

Quarterly Journal of Inebriety (Hartford, Conn.), April.

82 A Study of the Causes and Nature of Dipsomania. P. C. Remondino.
83 Management of the Victims of Drug Habits. David Paulson.
84 *The Actions of Morphin Upon Metabolism, with Especial Reference to Internal Secretion and its Bearing upon Toxicology. Edward T. Reichert.
85 Report on Heredity. T. D. Crothers.

Clinical Review (Chicago), June.

86 Operation for Post-menopausal Complete Prolapse of the Uterus; Operation for Extensive Vesico-vaginal Fistula. J. Clarence Webster.
87 Abdominal Colopexy for Prolapse of the Rectum; Fibroma of the Mesentery; Excision of Twenty-four Inches of the Intestine; Use of the Button; Paraplegia from Pott's Disease of the Spine. John B. Murphy.
88 Goiter Complicated by Stenosis of the Trachea. William E. Morgan.
89 Gastrostomy; Umbilical Hernia; Strangulated Scrotal Hernia; Tendon Suturing; Nephrectomy for Malignant Disease; Renal Calculi; Tetanus; Cerebellar Tumor; Laparotomy for Intestinal Perforation. E. Wyllys Andrews.
90 Two Cases of Weak Heart. George W. Webster.

International Medical Magazine (N. Y.), May.

91 A Case of Chronic Cystitis with Surgical Kidney, also Cystic and Prostatic Calculi. Israel Cleaver.
92 Hammonton, N. J., as a Health Resort. Charles Cunningham.
93 Appendicitis and Diseases of the Uterine Adnexa. Wilmer Krusen.
94 Incontinence of Feces. Samuel G. Gant.
95 The Management of Delayed Labor Due to Inertia Uteri. John C. Hirst.
96 The Treatment of Abscesses. Charles L. Leonard.

Medical Bulletin (Philadelphia), May.

97 *Fangotherapy. W. C. Hollopeter.
98 *Clay Dressing in Skin Diseases. J. Frank Wallis.
99 The Scope of the General Practitioner. Jay G. Roberts.
100 Aristol in Gynic Hyperasthesia. Ephraim Cutter.
101 The Treatment of Epilepsy. Charles W. McIntyre.

Medical Review of Reviews (N. Y.), April 25.

102 The Indications for and Limitations of Spinal Cocainization in Surgery. George Ryerson Fowler.

Cleveland Medical Gazette, May.

103 Bacteriology and Pathology of Diphtheria. Roger G. Perkins.
104 The Differential Diagnosis of Diphtheria. Edward P. Carter.
105 *Antitoxin in Diphtheria. P. H. Sawyer.
106 *Laryngeal Intubation in Diphtheria. Joseph V. Kofron.
107 The Pulse, Temperature and Respiration after Operation: from an Analysis of 114 Consecutive Abdominal Sections without a Death. Hunter Robb.
108 Animate Bodies in the Auditory Canal. J. M. Ingersoll.

The Woman's Medical Journal (Toledo, Ohio), April.

109 Blood and Nerve Supply of the Uterus and Their Relation to Hemorrhage. Rosannah Russell.

Kingston Medical Quarterly, April.

110 The Science and Art of Surgery: Its Progress During the Nineteenth Century and its Prospects for the Twentieth. R. W. Garrett.
111 Prevention of the Spread of Infectious Disease by Isolation. A. Haig.

112 Dr. Horsey's Address at Medical Convocation.
113 Valedictory Address—Medical Convocation. M. R. Young.

Iowa Medical Journal (Des Moines), May 15.

114 Palpation of the Uterine Appendages. George Gray Ward, Jr.
115 Reception Hospital for Cases of Acute Insanity. Henry M. Hurd.
116 Relations of the Private to State Hospitals. J. H. Kulp.

Oklahoma Medical Journal (Guthrie), April.

117 Theories and Facts Concerning the Perception of Renal Impressions. John Ransom Hamill.
118 Brief Notes from Medical Practice. C. Hill.

Albany Medical Annals, May.

119 *The Diagnosis of Cancer of the Stomach. Andrew MacFarlane.
120 *Surgical Intervention in Carcinoma of the Stomach. Willis G. MacDonald.
121 *Report on the Gastric Secretion in Twelve Cases of Pulmonary Tuberculosis, Five of which Gave No Evidences of Tuberculosis when First Seen. Leo H. Neuman.

Dominion Medical Monthly (Toronto), May.

122 Malignant Disease Affecting the Fundus of the Uterus. James F. W. Ross.
123 Examinations for Life Assurance. W. H. Pepler.
124 Suggestive Therapeutics. J. M. Jory.
125 Cases in Skin Diseases. Graham Chambers.

Medical Times (Philadelphia), May.

126 Bimanual Palpation of the Pelvic Organs. W. Oakley Hermance.
127 Creosote in Pneumonia—A Résumé. I. L. Van Zandt.

American Journal of the Medical Sciences (Philadelphia), June.

128 *Cancer Distribution and Statistics in Buffalo for the Period 1880-1899, with Special Reference to the Parasitic Theory. Irving Phillips Lyon.
129 Chronic Myocarditis and Fatty Degeneration of the Heart. Beverley Robinson.
130 *Osseous Cyst of the Tibia. Carl Beck.
131 A Clinical and Histological Study of a Case of Circumcorneal Hypertrophy of the Conjunctiva. Charles A. Oliver.
132 *Nitrous Oxid and Oxygen as a Surgical Anesthetic. S. Ormond Goldan.
133 *Croupous Pneumonia. George Wm. Norris.
134 *Heart and Circulation in the Feeble-minded. John Madison Taylor and F. Savary Pearce.

Pacific Medical Journal (San Francisco), May.

135 Upon the Treatment of Prostatic Hypertrophy. M. Krotoszyner.
136 Diseases of the Stomach and Their Dietetic Treatment. Alfred W. Perry.
137 Vaccinal Eruptions. Francis B. Williams.
138 Chloroform Anesthesia. A. F. Werner.

Atlanta Journal-Record of Medicine, May.

139 A Contribution to the Study of Deafness. Ross P. Cox.
140 The Treatment of External Cancer with Caustic Potash. M. B. Hutchins.
141 Infant-feeding. Samuel A. Visanska.
142 Subphrenic Abscess in its Relations to Some Complications. J. McF. Gaston, Jr.

AMERICAN.

1. **Prolapsed Kidney.**—Goelet holds that this condition is more frequent than usually supposed, not always giving rise to symptoms directly referable to the kidney. It is often not discovered because by the usual methods of examination only an expert can detect it, unless the kidney is much enlarged or the subject is thin. Palliative measures are of no avail, and therefore useless and unwise. Lumbar fixation is the correct method of treatment, if there is no contraindication; the operating being simple and free from risk, and successful when properly executed, with due attention to the patient's condition prior to operation, and during convalescence for a period of several months. The object of his present paper is to call attention to certain special symptoms and the method of examination which he has adopted. Pain referable to the kidney region is very infrequent. The symptoms are usually what may be termed reflex. The method of examination which he has found best is as follows: The clothing is loosened about the waist, the corsets are removed, and the undergarments that are suspended from the shoulders are rolled up under the breast, exposing the ribs below the level of the ensiform cartilage, while the skirts are drawn down below the level of the crest of the ilium. The patient is directed to hold up the upper garments with the right hand and to support the skirts with the left to keep them from dropping off. This gets her hands out of the way. She is then placed with her back to the edge of a table for a brace, or against the wall or a door, but she must not be permitted to lean back against it. The legs must be perpendicular to the surface upon which she stands. She is now directed to incline her body slightly forward by flexing it upon the pelvis. If the abdomen is unduly rigid and is not sufficiently relaxed by this position, additional relaxation may sometimes be secured by directing the patient to bend the right knee and rest the toe of that foot only on the floor, throwing the weight mainly upon the left foot. The examiner sits in front of her a little to the right. He grasps the right loin with his left hand, with the four fingers behind the right lumbar region and the thumb in front just below the border of the ribs, and when this is done the patient is directed to take several deep inspirations and to expire to the extreme limit. When expiration is complete, he presses the thumb well into the abdominal wall under the ribs, depressing it as much as possible so as to reduce the space between it and the fingers posteriorly. If the kidney is out of position, it must be below his thumb, and he can feel the kidney slip under his thumb if it is pushed up into position. With the left hand flat against the abdomen, the examining physician then draws the relaxed abdominal wall downward and depresses it by pushing with the fingers inward, then upward. If he succeeds in getting the fingers under the kidney, it will be pushed up against and then under the thumb by this manipulation. It will require some little practice to maintain the necessary depression by the thumb while attention is diverted to the manipulation of the other hand. Sometimes it will be possible to engage the kidney between the tips of the fingers below and the thumb above, before it is pushed up into place, and by manipulation outline it distinctly. This is possible, however, only when the abdominal wall is thin or relaxed. When the abdominal wall is thick or cannot be made to relax in the standing position, the patient is made to recline on the back, with right leg flexed, and the examination made in the same manner in this posture. The patient is ordered to take several deep inspirations and to expire to the limit, and at this moment the thumb is pressed well up under the border of the ribs. If this does not dislodge the kidney, she is directed to cough several times. The article concludes with the technique of the operation for floating kidney.

5. **Ether.**—Wynkoop concludes that ether is the safest of anesthetics, but that more care is necessary in the primary examination and in regard to position and condition of patient during narcosis. A good inhaler, the simpler the better, is needed, with fresh ether, made by a reliable firm; small, quarter-pound cans are better than larger ones. The ether should be added in small quantities, beginning the narcosis with the inhaler a short distance from the patient's face and gradually bringing it down. A more detailed study of this subject should be given in our medical schools, and in all operations a trained anesthetist is required.

8. **Renal Tuberculosis.**—The recognition of renal tuberculosis is apt to be tardy, though the trouble is not uncommon. Brown insists on the importance of a routine search for tubercle bacilli in the urine and calls attention to possible errors in diagnosis from smegma bacilli. To avoid this, if the urine is collected from the bladder by a catheter, the then demonstrating the absence of these bacilli will correct the mistake. The subjective symptoms are sometimes pronounced and often absent. A dull, aching pain in the lumbar region is significant, as also is the more acute kind of pain referable to the kidney or ureter. In many cases symptoms resembling mild malaria occur, and he looks upon them as not infrequent precursors of the later localized ones. The frequency of urination does not usually appear until the lower segment of the ureter has been involved, with an irritable state about its mouth. The principal objective symptoms are large and tender kidney as well as all grades of pyuria and hematuria, besides a just

appreciable or very marked diurnal temperature variation, loss of color or weight, tuberculin reaction, and finally the presence of tubercle bacilli. He attributes much importance to tuberculin reaction, and advises the employment of tube cultures in all cases of ureteral catheterization to demonstrate the presence of other pathogenic micro-organisms. Nephrectomy for tuberculosis has been comparatively successful, but few deaths having been reported. In his experience persistent and exhausting vomiting has caused more deaths than any threatening anuria. If the disease is seen to extend down the ureter to a point below the first sacral vertebra he is not yet ready to advise total extirpation, since a considerable amount of tubercular ureter left in a functionless state may recover under subsequent treatment. If it were certain that the ureter was diseased from kidney to bladder it might improve the patient's chances to have a primary ureterectomy of the lower half, while the proximal end of the tube was given a cutaneous implantation to drain the kidney until an early favorable time for nephrectomy. Often in cases presenting tubercular vesical lesions where only one kidney is involved, nephrectomy, he thinks, is indicated as offering the best chances for extension of life and comfort. A number of histories of cases are reported illustrating the different points made in this paper. He concludes with the remarks that too great pains can not be taken by the physician and surgeon to demonstrate the location and extent of the disease before administering the treatment. The integrity of the other kidney, of course, has a great bearing on the surgical aspect of any case. In the ward hospital cases immediate operation appears to be the only alternative, but for those who can afford climatic changes and rest, a careful preliminary observation of the existing condition of the urinary tracts should precede their travels and be repeated in order to keep posted regarding the advancement of the disease.

11. **Inheritance.**—Adami's article is lengthy and too detailed to be abstracted in full. He suggests a sort of side-chain theory of heredity similar in some respects to the Ehrlich theory of immunity, and applies this to inheritance and atavism and the inheritance of acquired characters. He takes issue with Weissmann, maintaining that in certain ways acquired characters are inherited. The article must be carefully read to be properly appreciated.

13. **Muscular Action of the Arteries.**—Smith remarks on the muscular action of the arterial coats and its importance to the circulation in general; also the effects of calcification or sclerosis. He notices Dr. Daland's recent paper on arterial spasm, which he says throws a powerful light on the action of certain poisonous, or at least irritant, substances retained in the blood under conditions of renal insufficiency. What capsicum did in a high degree and for a brief period in Dr. Daland's case is done in a minor degree by excrementitious substances constantly remaining in the circulation.

17.—See abstract in THE JOURNAL of May 25, p. 1490.

18.—Ibid.

19. **Complicated Fractures.**—The methods of examination of fractures are first given by Manley, who insists on completeness of detail, inspection, posture, manipulation, narcotic relaxation of muscles, and lastly consultation with more skilled practitioners in this particular line. He summarizes the principles of treatment in: 1. Placing the limb in a comfortable position. 2. Securing an unhampered circulation. 3. Reduction of fragments and support. He criticises the time-honored rule of immediately reducing fragments and immobilizing them, and shows how this is impracticable in many fractures, and needless in some. It has been his practice to dispense with splints where marked displacements do not exist, and with the best results. With multiple fractures and general crushing injuries he would bolster up the fractured limb, relax the flexor muscles, leach, bathe and swathe the parts, await the subsidence of inflammation, of plastic union of fragments, and then splint, not so much to splice the fragments as to hold the joint and support the enfeebled parts. The open incision recommended by some he thinks is full of peril on account of the enfeebled circulation, though it would seem an ideal means in certain fractures of the femur with overriding of the fragments for example. The ambulant treatment of which we hear so much is not practicable in the great majority of lower-limb fractures, where pressure and rest in bed are indispensable after shock. With the patient under close observation, with the aid of antiseptics, anesthetics and aseptic precautions, we first endeavor to preserve the limb in the best shape we can. He advises practitioners to treat fractures at home, not send them to hospitals, and if they feel incompetent, to take a post-graduate course, or several of them, where there are ample facilities for instructions in this particular line.

20. **Pityriasis Versicolor.**—From his experience Sobel concludes that: 1. The old theory that only hidden parts are affected is no longer tenable. 2. Allen's iodin test is of marked value not only for class-room demonstration and for bringing into relief pale and hidden lesions of pityriasis versicolor, but also for differentiating parasitic or presumably parasitic skin affections from those of a non-parasitic nature. 3. Recurrences are in the main due to the overlooking and non-treatment of the supra-pubic region and to the use of desquamative agents to the exclusion of penetrating ones. Both must be combined if a cure is desired. 4. Phthisical subjects, while affected in great measure on account of the hypersecretion of sweat, do not form the greater part of these patients. It occurs in all degrees of health and disease, a marked hyperidrosis, however, predisposing towards it. 5. Children and the very old are occasionally, though rarely, attacked. 6. It may occur in all shades from a very light pink to almost coal black (pityriasis nigra), the color being influenced by the condition of cleanliness, the circulation of the skin, the occupation of the patient, and the color of the underclothing.

21. **Biceps Jerk in Tabes.**—From a number of observations, some of which are reported, Behrend concludes that ataxia in the arms is, as a rule, more marked when biceps tendon jerk is absent and usually co-incident with that of the legs. In the presence of biceps tendon jerk with slight ataxia of the arms, ataxia of the legs is invariably well marked. Sensation is usually normal in cases with normal biceps tendon jerk, and defective when it is absent. That arthropathies are present only in the marked ataxic. The loss of sense of position is almost constant in advanced tabes and the loss of weight sense is infrequent. The shooting pains in the arms do not bear any relation to the degree of ataxia. The intensity of the symptoms is not dependent upon the duration of the case, but rather upon the extent of the sclerotic process. Where biceps tendon jerk is absent, the sclerosis probably extended to the cervical region, but we must remember that this reflex may be absent in normal individuals.

22. **Prostatic Hypertrophy.**—Squier calls attention to the causes of prostatic hypertrophy, which he thinks are largely comprised in abnormal sexual practices partly due to deficient information on the subject.

24. **Streptococcus Bronchitis.**—This name is given by Forchheimer to a form of bronchitis following influenza in which the streptococcus seemed to be the prominent and often the only microbic attendant. It usually follows the respiratory type of influenza, though any form may precede it, and symptoms of influenza disappear when the bronchial trouble appears. It usually begins rather suddenly, with spasmodic cough, often simulating whooping-cough, occurring at night and in the day time, with sputum varying from merely serous to mucous and purulent. The larynx is seldom implicated, but it involves the medium-sized bronchi. The temperature is abnormal, ranging from 96 F. in the morning to 99 to 100 or more in the evening, thus having an abnormally great diurnal range. The pulse may be often slow, though it sometimes is rapid. In the rudimentary type of the disease is the shortest course, and the temperature is not typical for any length of time. The cough is not thoroughly developed and expectoration is limited. The excessive form takes the type of septicemia with intermittent fever, sweats, and occasional slight chilliness. Two cases are reported of septic pyemia originating in this condition. In patients where the cardiac condition

was such that heart weakness could be easily produced, it developed unless special care was taken. In the protracted cases the chief difficulty in differentiation will be from tuberculosis, and he thinks the rule has been given too rashly that subnormal temperature with evening increase is characteristic of tuberculosis. In the majority of cases there will be little difficulty. If there are general bronchial symptoms and no tuberculosis bacilli, but some other form of the streptococcal type, this condition can be diagnosed. He thinks for this condition the benzoate of soda in large doses, 1 dram every two to four hours, always every two hours in the beginning, is advisable. For the annoying cough, sedatives, and for excessive expectoration, atropin or belladonna are of advantage. In the severer forms unguentum Credé has been very serviceable, and, combined with antistreptococcic serum injections in special cases, has given him good results. In all cases we must bear in mind that we are dealing first with a local infection; secondly, with a general one; the concept of a septicemia, acute or chronic, must guide us in the therapy employed.

25. **Fourth-of-July Tetanus.**—Wells' article is summarized as follows: Tetanus is endemic in Chicago, the specific organism being present in the dirt of the streets. Every Fourth of July an epidemic occurs, because these bacilli are carried deeply into wounds before wads from blank cartridges, and are then under favorable conditions for multiplication. Epidemics which always occur in other portions of the country at the same time are presumably due to the same causes. Most of the cases occur in wounds that have been improperly cared for, the wads not having been removed or suitable drainage instituted. Therefore the first indication is to secure thorough surgical cleansing and drainage of the wound, preferably and almost necessarily under an anesthetic. As, however, tetanus sometimes occurs even in well-drained wounds, and considering the frequency with which it follows blank cartridge wounds, it seems to the writer that such cases should receive a prophylactic dose of, say, 5 c.c. of tetanus antitoxin as soon as possible after the wound is first seen. It seems certain that if antitoxin prophylaxis were adopted there would be no further Fourth of July epidemics, and this end justifies the means.

26. **Methylene-Blue Injections in Pleurisy with Effusion.**—Lewis has used methylene-blue, employing the serum itself as a solvent, after making a solution of it with the blue returning it into the cavity. The technique of his operation is described. His process is by using the aseptic syringe and introducing the drug after examination of the serum without withdrawing it. It does away with sterilizing the syringe and otherwise preserves it, for the action of the blue is rather destructive to valves. He has employed this method in twenty-four cases of pleural effusion, including suppurative case. The average duration of treatment of the twenty-three serofibrinous cases were a little under fourteen days. The quantity of methylene-blue employed was from 5 to 15 grains.

27. **Influenza.**—The new symptom described by Kolipinski consists in the appearance on the mucous membrane of the soft palate of small convex projections of a pearly whiteness or transparency. Their size is that of a grain of sand. They may be few or numerous, and are best displayed on the base of the uvula, median raphe, the lateral borders of the same, the anterior surface of the palato-glossal fold, about the outer border of the tonsil. A spatula rubbed over them gives a hard, rough sensation. Full illumination is necessary and direct or diffused sunlight is best. There are no subjective sensations connected with them.

28.—See abstract in THE JOURNAL of April 20, p. 1136.

29. **Diphtheria and Typhoid.**—Five cases are reported by Manges, showing that the Klebs-Loeffler diphtheria bacillus occurs sometimes in typhoid fever, and he maintains that this is not at all rare or absent as has been asserted by Curschmann. He also calls attention to certain peculiar ulcerations of the pharynx in typhoid that were first noticed by Bouveret and have been recently studied by Schaefer. They are situated in the anterior pillars of the fauces, are oval in shape, averaging from 6 to 12 mm. in length and 4 to 12 in width, the long axis parallel to the long axis of the tonsil, often surrounded by a small hyperemic halo. Their base is grayish-yellow or grayish-red, usually smooth, but sometimes granular. There is no false membrane or marked glandular enlargement. As a rule they are single, but several small ones may coalesce into one large one. The average duration of these, according to Schaefer, is about twelve days. In the case he reports here, there was an atypical whitish patch and Klebs-Loeffler bacillus was present on one day; the ulcers lasted over three weeks. He considers it a Bouveret ulcer with diphtheria infection.

30. **Pulmonary Tuberculosis.**—The points specially urged by Anders are the home treatment of tuberculosis, fresh air and sunlight, and he advises patients, when possible, to lie quite nude exposed to the sun's rays for one-half to two hours at a time. The prejudice against night air should be done away with, and respiratory exercises are recommended. He suggests as a relief to cough when it is aggravated by the recumbent position that the patient should assume this for short periods during the day, practicing the deep breathing exercises. This trains the lungs to be less irritable at night. Two drugs are mentioned as having been of special use to him, though seldom referred to. They are aromatic oils, the oils of sandalwood and erigeron. The first in 10-drop doses on sugar every three or four hours seems to very much relieve the cough. The latter in 5-minim capsules every two, three or four hours has been of decided benefit in the hemoptysis of tuberculosis. Chest strapping has been useful in several cases where the coughing has excited dry pleuritis, and he has found olive oil useful as a substitute for cod-liver oil. He concludes with a plea for the registration of tuberculosis.

31. **Tabes Dorsalis.**—The symptoms of tabes are discussed and the following ones named as cardinal by Diller: 1. Failure of knee-jerks. 2. Romberg symptom. 3. Argyll-Robertson pupil. 4. Lightning-pains. 5. Depression of the function of the bladder and genitals. With any three of these symptoms he believes the diagnosis may be made with certainty, and probably with any two of them, when evidence pointing to multiple neuritis, paralytic dementia or cerebrospinal syphilis is absent. The more important secondary symptoms or signs are: 1, parasthesia, anesthesia or analgesia of the legs; 2, locomotor ataxia; 3, transient ocular palsies; 4, ulnar paresthesia; 5, optic atrophy. Two of the cardinal signs and one of the secondary are sufficient for absolute diagnosis, and two of the secondary and one of the primary make tabes most probable.

33. **Hemorrhoids.**—The method recommended by Hawkins is the use of the clamp or hemostatic forceps, tightened and the entire mass cut off close. He then follows up with suture and sews up the stump, when the clamp is released. He says this operation is less objectionable than the ligature or clamp and cautery methods. He has done this in his office and allowed the patient to return immediately home. There is no danger from hemorrhage, very little pain, quick recovery and an absolute cure. The ordinary preparatory and after-treatment is employed.

40. **Tuberculous Fistula.**—Monroe describes the different symptoms of tubercular from other fistulas. They are a general run-down condition in the tubercular variety, with a cough, and he finds as a rule the anus surrounded with long, silky hair, which always leads him to suspect tuberculosis. The anus also appears to be depressed and drawn inward. In tubercular fistula the external opening is large and ragged, differing in this from the ordinary type. The pain is slight as compared with the ordinary fistula. The discharge as a rule is profuse, but much thinner and watery. He advises operation in tubercular fistula; it is easy on account of the lack of pain, but if an anesthetic is used, chloroform is advisable as not irritating the air passages. There is usually little hemorrhage. In place of curetting he is in the habit of using carbolic acid 1 to 4 of water, swabbed over the ulcer and cut surfaces, and then he packs lightly with borated gauze. The usual treatment of fresh air, sunlight, etc., is

advisable in the after-management of these cases, and outdoor life is to be recommended to patients of this class.

51. **Suprarenal Gland and Peritonsillar Abscess.**—Somers recommends the use of suprarenal gland in 5-grain tablets, fairly chewed and held as far back in the pharynx as possible as a remedy for embarrassment of respiration, etc., in peritonsillar abscess. He prefers this method to a spray, and reports cases. When the pus is superficial it may discharge itself under this treatment, but when it is deep, operation, of course, will be required. In this case, however, the use of the drug is good, as it reduces the excessive swelling and enables the surgeon to get at the spot more safely and easily.

63. **Rabies in Germany.**—The results of the Pasteur preventive treatment in German are reviewed by Ruhrah, and he finds that in Prussia, while there is a definite increase in the disease in animals, with consequent increase in the number of people bitten, the mortality percentage has been distinctly lowered by the Pasteur method. In the untreated cases during 1899 the deaths amounted to 6.9 per cent., while in the treated cases, even including two doubtful ones, it was only 0.52 of 1 per cent.

71. **Urine in Life Assurance.**—Kauffman sums up as regards albuminuria, that Bright's disease nearly always is accompanied with albuminuria, but that we should not always hold that albuminuria means Bright's disease. The examination for renal casts is most important, and should never be omitted unless other evidences of Bright's disease are absent. The so-called physiologic albuminurias are not to be lightly recommended for acceptance. As regards the finding of sugar in the urine, no case of glycosuria can be unhesitatingly recommended. Only in instances where it is due to known and temporary causes, such as when from laughing gas or some exceptional dietary error, should it be passed over.

72. **Marriage and Life Insurance.**—While marriage in both sexes tends to longevity, insurance companies are inclined not to take female risks, largely on account of the special perils of child-birth and also the moral risk. They claim that it is not the proper order of things for a married woman to provide benefits and insurance for others. She should be the recipient. French suggests these points and gives the practice of several insurance companies in regard to this question. The line is not drawn at marriage per se, but at some of the conditions which accompany it. Only one of the distinctions has any reference to longevity, and that relates to the child-bearing period. All the others deal mainly with the moral hazard, and are applicable only to women.

73. **Death-Rate of the United States.**—Cowgill's statistics show that the actuary records show the death-rate per 1000 of the population is lowest in the Northwestern states, including all of those states north of California and Colorado and east of Iowa and Minnesota. In the Northeastern division, which includes the New England states, New York and New Jersey, the death-rate is highest, being 20 per 1000 as compared with 8.26 for the former division. The next lowest to the Northwestern division is the North Central, which includes Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Pennsylvania and Wisconsin, being 12.58 per 1000. In the Southeastern division, including the South Atlantic states, it is next highest, being 13.20, while the South Central, which includes the Gulf states, with Kentucky and Arkansas, it is 13.17; in the Southwestern division, including Colorado and Utah, as well as California, Nevada and New Mexico, it is 12.70. These differences indicate to him the impracticability of having one standard mortality table for the whole country where the localities and conditions so widely differ.

84. **Morphin.**—Our knowledge of the physiologic properties of morphin is fragmentary and unsatisfactory, and the importance of the subject has led Reichert to experiment on a number of dogs to study not only the general metabolism but the bearings upon toxicology. The calorimetric method was chosen. It is based on the fact that heat produced in any structure is proportionate to the degree of metabolic activity of that structure; therefore, the heat produced by the entire organism during any given period is an index of the mean degree of the activity of metabolism in all the tissues. However, as each structure is largely independent in its chemical processes, this index can be applied as a standard to any organ only in conjunction with what special evidences exist regarding metabolism in that organ. Twelve experiments were performed. In each the heat processes were studied before giving the morphin and after. The results were decided and quite uniform, and heat production was decreased in every experiment, but its effects were decidedly more marked, as a rule, during the first two hours after morphin. The average decrease in the ten experiments in which the dose was .01 gram per kilo was 59.2 per cent. Heat dissipation was also decreased in every experiment and the average for the same experiments was 41.7 per cent. The amount of depression of heat production was about 20 per cent. greater than that of heat dissipation. The cause of the decrease of heat dissipation is chiefly due to compensating action of the thermolytic mechanism to conserve the body heat and to a direct depression of the circulation. The cause of the decrease of heat produced is theoretical, and the author concludes that the profound depression produced in the metabolism is not thoroughly shared by the metabolic processes concerned in internal secretion. The most important indication in morphin poisoning is not merely to administer specific excitants to the respiratory center, but to reach the cause of the depression and direct some measure to the processes concerned in internal secretion and repair. It is probable that most agents proven of value are so because of their action on these processes, though this has been hitherto unrecognized. Atropin, he claims, can not be held a reliable respiratory stimulant in morphin poisoning. There is very little evidence that it is to any marked degree a metabolic excitant. It is probable that it is almost a universal depressant, and its reputed value in opium poisoning is due largely to circulatory and cerebral excitation, coupled at times with a more or less important increase of the rate or depth, or both, of the respiratory movement. Caffein, besides its value as a direct respiratory, cardiac and psychic stimulant, is probably of indirect value by affecting internal secretion through the nervous, muscular and secretory structures. It increases body temperature by increasing heat production, and in some obscure way affects general nutrition, lessening the quantity of urea formed, facilitating assimilation, furthering chemical processes in the muscles. Strychnin did not particularly seem a valuable antidote, but aside from its direct action on the respiratory center it may be of value because of its tonic powers on trophic and allied centers. That it affects internal secretion is shown by stimulation of the salivary glands and increase of heat production and effect on the nutritive processes generally. Cocain is one of the most powerful respiratory stimulants and very general and potent metabolic stimulant. The other agencies mentioned are faradization, cold douches, prolonged hot baths, etc.

97.—See abstract in THE JOURNAL of April 13, p. 1062.

98. **Clay Dressings.**—Wallis has for six years employed wet clay as a dressing in skin diseases. It has the mechanical property of holding water, thereby assisting osmosis, and he attributes to it also certain therapeutic effects from the mineral salts contained. It is preferable to sterilize it by baking in the oven for several hours before using. He applies it in the form of paste under several layers of gauze, which must be kept constantly wet by covering with a wet towel several times a day. Clay dressing should be removed every forty-eight hours. The most forms of inflammatory skin diseases do well under this treatment; he notices especially the rapidity of healing in ulceration. It admits of many forms of modification and medication, and he suggests the use of bichlorid of mercury, phenol, boric acid, the soluble alkalies, and glycerin.

105. **Diphtheria Antitoxin.**—Sawyer has had within two years eight cases of laryngeal diphtheria all treated with antitoxin; three were *in extremis* and were intubated, and he thinks that if the one which died had been intubated he, too, would have lived. The nose and pharynx were also seriously involved. Five recovered without sequelæ; two, in whom the

administration was delayed, had some streptococcal poisoning; one had a certain amount of paralysis, and the other suffered with bronchitis and extreme cardiac weakness. He believes the value of antitoxin lies in the immediate arrest of formation of membrane, the healthy condition in which it leaves the mucosa, rapid convalescence and the absence of sequelæ. The largest dose he used was 5000 minims in a little girl 4 years old. In the other cases from 1000 to 3000 units were used.

106. **Intubation in Diphtheria.**—Kofron believes that one is justified in intubating when there is dyspnea with dry, stridulous, embarrassing, suffocating cough, or when the cough becomes suppressed; also when dyspnea is not relieved by previously administered antitoxin and whenever it is increasing in intensity; when the dyspnea is accompanied by an irregular, rapid, easily compressible pulse, or when the pulse becomes imperceptible; when restlessness is increasing, even if dyspnea is not alarming; if spasmodic attacks of dyspnea occur, and if cyanosis occurs. If we have a combination of these symptoms, the operation becomes imperative and no delay should be tolerated. He notices some of the opinions in regard to the comparative value of tracheotomy, and maintains that intubation has a great advantage over the latter in that there are usually few objections on the part of the parents to intubation, while there would be many to tracheotomy.

119. **Gastric Cancer.**—The methods of diagnosis of gastric cancer are noticed by MacFarlane. The general constitutional symptoms are not at all pathognomonic of malignant disease of the stomach, but are characteristic of cancerous growths anywhere. The local vary with the extent of the disease and the mechanical depend upon the position of the disease in the stomach. The loss of appetite and the absence of hydrochloric acid indicate catarrhal conditions of the stomach due to the growth and its toxins, but where the cancer is developed on the basis of an ulcer and is limited, hydrochloric acid is not usually absent. Lactic acid exists in the absence of free HCl and characteristic coffee-ground hemorrhage is diagnostic. The mechanical signs are the result of obstruction at the pylorus or cardia. The tumor, when it exists, of course, is important and its motility is diagnostic. Pain is rarely absent. Three symptoms are of special significance: the absence of hydrochloric acid, presence of lactic acid, and the occurrence of motor disturbances. The question arises, how can the general practitioner who sees the case at its very inception make a probable diagnosis of malignancy? He could easily determine disturbance of nutrition by finding food two hours after an Ewald test breakfast or six hours after a Riegel test meal. If the patient states that he has vomited food taken the day before, the passage of the stomach tube is not even necessary. This does not prove, of course, that the patient has cancer, but it does prove that one has to do with no simple indigestion or dyspepsia and that the case should be given a thorough examination.

120. **Gastric Cancer.**—The surgery of gastric cancer is considered by MacDonald, who thinks there is little justification for total extirpation and that the old rule of cutting one centimeter beyond all evidence of infiltration is not enough; that three centimeters should be the limit, and in the duodenum at least two centimeters from the most dependent portion of the growth. He uses and illustrates here the more recently devised clamps of Kocher, and points out their advantages. For two years he has employed the von Hacker method of attaching the jejunum to the posterior gastric wall with re-anastomosis between the duodenum and the jejunum; the results have been satisfactory. During the past year he employed it 8 times with 7 recoveries. He used the suture mostly for the gastric jejunal anastomosis, and for the secondary one the Murphy button. While the technique of the method is rather complicated, he thinks the whole operation can be done in forty minutes, including the closure of the abdomen. Its advantages are, freedom from contamination of the wound by the stomach contents, accessibility of the neighboring lymphatic nodes, no subsequent danger from suture perforation, freedom from hemorrhage and saving of time. There is no embarrassment from the amount of tissue removed, as no effort is made to bring the duodenum and the remainder of the stomach in apposition.

121. **Gastric Secretion and Tuberculosis.**—Twelve cases are reported by Neuman, pointing out the gastric disturbance which precedes the onset of tuberculosis. In five of the cases there were neither physical nor subjective symptoms of tuberculosis when first seen.

128. **Cancer Distribution and Statistics.**—Lyon's article is an analysis of the statistics of cancer from the original board of health data of the City of Buffalo for a period of twenty years, 1880 to 1899 inclusive. The results are tabulated and discussed at length and the principal facts and results summarized in substance as follows: 1. The mass distribution of cancer on the map shows a particular concentration in the German wards. No other relation than that of race can be demonstrated to exist between this area of concentration and local conditions. 2. That there is a real relation between this local concentration and race is further indicated by the race table, which shows that cancer is many times more frequent among the foreign born, and particularly the Germans, than the native born. This latter fact is also in accord with the census statistics for twenty-eight large cities. The cancer rate of foreigners in general in Buffalo was 4.5 times the rate of the native born, and the corresponding rate of Germans and Poles was still higher, 4.81. 3. The Germans and Poles are further distinguished by the high rate, 43.5 per cent., of involvement of the stomach, or 2.8 times the rate shown by the native born. Cancer of the stomach, therefore, was ten times more frequent in Germans and Poles than in the native born in Buffalo for equal numbers of each. These figures seem hard to explain on the embryonic theory, and tend to support the parasitic theory by assuming that the peculiar diet of the Germans is more liable to be contaminated with cancer parasites than the ordinary diet of other classes. Cancer of the uterus and breast in Germans and Poles is correspondingly low, being hardly one-half as frequent as in the native born. This seems to be a further argument for the parasitic as opposed to the embryonic theory, since the birth-rate and habit of nursing their children is greater amongst the Germans than Americans. 4. The ratio of males to females, the latter taken as 100, was 93 for the Germans and Poles and from 51 to 61 for all foreigners except Germans and Poles. The high German male rate is probably directly dependent on the frequency of gastric cancer and the infrequency of mammary and uterine cancer in the Germans. For all classes the ratio of males to females was found to have increased during the twenty years covered by the investigation. This rise was very slight for the native born. 5. An increase in general cancer rate from 32 to 53 per 100,000 of the population (65 per cent.) took place from 1880 to 1899. A similar increase has been shown in other countries, and is partly real, not entirely apparent. The rate of increase is shown to depend on changes in the proportion of foreign born, because the cancer rate is so much higher than in the native born.

130. **Tibial Cysts.**—The importance of diagnosis between benign cysts of the long bones and sarcoma is emphasized by Beck, but it is not very difficult to confuse the two diseases. Both are alike in their slow and painless onset, often following trauma, and gradual bulging of the area and their preference for youthful age. The fact that the contents of cysts are different from sarcoma would show that an exploratory incision would clear the question, but he has found the Roentgen rays decidedly useful in this diagnosis. In osteosarcoma the outline of the bones appears more or less abnormal or indifferent, some areas seeming translucent, while in osseous cysts the cortex appears thin and narrow, but well marked and regular. The fluid center of the bone is entirely translucent, adjacent epiphyses are normal. This regularity of the texture of the walls of the cavity in skiagraphs, seems to be the characteristic skiagraphic feature of the osseous cyst in contradistinction to the irregular texture of the osseous sarcoma. The vicinity

of the epiphyses is also in favor of cysts for histologic reasons. He reports two cases.

132. **Nitrous Oxid and Oxygen Anesthesia.**—The advantage of combined nitrous oxid and oxygen anesthesia are described by Goldan, who illustrates the apparatus and calls attention to points which he has noticed in administration: "1. The apparatus must be in perfect working order and always tested by the administrator himself. 2. A sufficient supply of both gases at hand. 3. Atmospheric air must be rigidly excluded. In patients with beards the nostrils may be closed; the mouth tube may be used instead of the face-piece or the beard thoroughly moistened with water. 4. The patient should be prepared as for any surgical anesthetic. 5. The gasbags should never be fully inflated, but between one-half and two-thirds full. In this way the pressure of the gases is kept more nearly equal. 6. Oxygen should not be turned on immediately the administration begins, but sufficient nitrous oxid inhaled to replace the oxygen existing in the blood; three to six breaths will be sufficient. Oxygen should be admitted gradually and in quantity determined entirely by the patient's condition, remembering cyanosis calls for more oxygen; evidences of excitement and returning consciousness meaning that less oxygen is required. In using the gases in long narcosis the caps of especially the nitrous oxid cylinders are apt to freeze, owing to the transition of the gas from the liquid to the gaseous state, the cylinders becoming covered with frost; to avoid this a towel wrung out of boiling water should be placed about the tap, but not about the cylinder itself. The patient should always be placed upon the operating-table in the position in which the operation is to be performed; any position may be employed, providing it will not interfere with the anesthesia. The preferable postures, in my experience, have been the dorsal and Sims." The sensations from this kind of anesthesia are much the same as with gas alone, but the oppressive ones are usually absent. There is more or less sensory anesthesia while consciousness still lasts. Insensitive conjunctivæ and snoring respiration are signs of anesthesia in dental cases. The snoring should be permitted from three to five minutes before removing the mask, which gives a longer period for operation. The cyanosed condition seen in using gas alone is never observed with this. Consciousness returns immediately. The shock from this method is less than from ether and chloroform and after-symptoms are not especially troublesome. Headache may occur, and also nausea and vomiting, but rarely persistent. The method is more expensive than the others, which may be to some a disadvantage.

133. **Croupous Pneumonia.**—This article is a clinical study of 500 cases from the recent records of the Pennsylvania Hospital. Norris' analysis indicates a large increase in the admission of cases of pneumonia in the last two years, over two-thirds of the cases occurring in the last one-half of the period. Out of 500 cases, 125, or 25 per cent., died; 7 became phthisical. The mortality was highest among the Germans and lowest among the Russians, though the numbers are comparatively small. He attributes the lessened mortality among the Russian Jews to temperate habits in regard to alcohol. Of the cases known to have occurred in drunkards the mortality was 7 per cent. The greatest number of cases occurred in the earlier decades of life and among teamsters and others employed in outdoor occupation. The lower lobes were the most frequent seat of the lesion and the highest mortality was when both lower lobes were alike affected. The apical pneumonia occurred most frequently in the young. In the complicated cases the mortality was about 40 per cent.; in uncomplicated cases only about 10 per cent. The study illustrates the fact that the highly febrile cases are less dangerous than the slightly febrile ones, the former being an index of vital force. The greatest frequency of the disease was in the spring months, which agrees with other statistics. A chill occurred at the beginning in just one-half of the cases; 301 cases ended by crisis; 74 by lysis. Pseudocrisis was observed in 54 cases at varying periods from the 7th to 21st days. Previous attacks were known to have occurred in 57 cases. Both albumin and casts were present in nearly one-half of the cases. In fatal cases they were absent in a very small proportion. The complications were various, jaundice, typhoid fever, delirium tremens, and pleural effusion being the most important. The mortality was highest with jaundice and delirium tremens. Inequality of the pupils was found in only a very small proportion of cases and would seem to be rare. It is not infrequent in healthy persons. Norris does not seem to consider Sighicelli's observation as regards this point as being very much confirmed. Relapses occurred in only three cases. The treatment was expectant and symptomatic; a specific treatment has not yet been discovered.

134. **Heart and Circulation in the Feeble-Minded.**—In the study of the circulation of 72 cases of feeble-minded in the Pennsylvania school at Elwyn, Taylor and Pearce found a great number of varied cardio-vascular signs altogether out of proportion to mental defect, so much so as to warrant assuming vascular heart disease to be an important etiologic factor in continuing the downward course of imbeciles. They urge careful anthropometric studies and observations of somatic diseases other than those of the nervous system in these cases, and are impressed by the fact that many high-grade cases would be bettered by more attention being paid to the heart and circulation. A careful study of the blood and excretions will be a valuable aid. The action of certain alkaloids needs study and experimentation. The use of specially directed regulated movements will greatly help these unfortunates. They urge also that over-exercise should be carefully avoided in their training.

FOREIGN.

The Lancet, May 25.

The Pathology and Diseases of the Thyroid Gland. WALTER EDMUNDS.—Edmunds' third lecture discusses chiefly the pathology of goiter and Graves' disease. As regards myxedema and cretinism he passes them with briefly saying that the working out of the nature and treatment of these diseases is one of the most brilliant advances in medicine. In cases where goiter is the only trouble, he thinks it well established that the administration of thyroid is the best treatment and mentions two cases cured by this method. Complete excision of the goiter formerly practiced is now abandoned, though partial excision is still practiced and sometimes causes a satisfactory diminution of the remaining portion. Under Graves' disease he includes all cases of goiter with symptoms not explained by pressure. The question whether the primary lesions is in the nervous system or in the thyroid is discussed and the theory of hypersecretion of the glands as the cause of the trouble is mentioned as supported by the marked contrast between this condition and myxedema. He, however, holds that it does not follow that the secretion is the same as in health. There is proportionately less colloid and in some cases no colloid at all in Graves' disease. The changes that are found are practically identical with those of compensatory hypertrophy as seen in animals after partial removal experiments. In fact, the resemblance leads to the conclusion that these changes are also compensatory in character; that they are secondary to some defect elsewhere in the system, possibly in the parathyroid, but there is no evidence either way. The treatment of exophthalmic goiter is briefly noticed, and the effects of thyroid administration, in some cases attended with benefit, often has made patients worse. Pregnancy is said to benefit it, but the disease sometimes originates in pregnancy. Operative methods have been employed. They are mainly three: operation on the cervical sympathetics; operation for diminishing the blood supply by ligating some of the supplying arteries, and operation for the removal of portions of the goiter. The first of these is based on the idea that these nerves are the starting point of the disease, but Edmunds thinks the probability is that if the nervous system is the starting point the fault lies rather with the cerebrospinal system and not with the sympathetic. Still the latter may be involved in some of the symptoms, the exophthalmus for example. Tremors and mental excitement would be connected with cerebrospinal symptoms. The results of operation on the sympathetic are rather dubious: as Boissou says, they have no constancy, and are as much confused therapeutically as physiologically. The ligation of the arteries to the thyroid has been done with some success, but

the operation is one of some difficulty. The removal of portions of the gland has been combined in some cases with sudden death accountable for by no other cause and the chief theories in regard to this point are noticed. He thinks, however, notwithstanding this danger it need not turn us wholly from the operative treatment of the disease, and reports cases where decided benefit has followed. In two cases in his own experience there was great improvement. The lesson possibly to be learned from the fatal cases is not that operation should not be performed, but that they should be performed earlier.

Journal of Hygiene, January.

Pathogenic Microbes in Milk. E. KLEIN.—In an examination of 100 samples of milk collected and analyzed at the instance of the medical office of the London County Council, Klein obtained the following results: 1. Seven per cent. of the samples of "country" milk produced typical true tubercle in the guinea-pig. 2. Eight per cent. of the samples of "country" milk produced typical pseudo-tuberculosis (non-acid fast bacillus of pseudo-tuberculosis A. Pfeiffer). 3. One per cent. of milk samples produced diphtheria in the guinea-pig, yielding the typical true B. diphtheriæ. 4. One per cent. of milk samples caused a chronic disease (in most cases with fatal results) due to a pathogenic torula apparently differing in cultural and physiologic characteristics from the torula (pathogenic blastomycetes) obtained by Sanfelice, Plimmer and others from human cancer. 5. Out of the secretions of the cow's udder two pyogenic microbes were obtained: B. diphtherioides and streptococcus radiatus (pyogenes).

Artificial Modifications of Toxins with Special Reference to Immunity. JAMES RITCHIE.—The general conclusions of Ritchie's article in regard to this subject are as follows: 1. Tetanus toxin under the influence of hydrochloric acid loses with comparative readiness its virulently poisonous properties. It does not, however, so readily lose its capacities of producing immunity, and when all trace of toxicity has disappeared the capacity of producing immunity still remains. The less poisonous substances produced in the modified toxin are probably of the nature of toxoids. 2. Tetanus toxin is also susceptible to the action of alkalies such as sodium hydrate and sodium carbonate, under which it again loses its toxicity. 3. Ricin is very resistant to the action of hydrochloric acid. There is evidence here also that when the toxicity is destroyed the capacity of producing immunity also remains. 4. Abrin is also resistant to the action of hydrochloric acid, but it is relatively susceptible to that of sodium hydrate. 5. Diphtheria toxin is very resistant to the action of hydrochloric acid, but it is relatively susceptible to the action of sodium hydrate. In the case of toxin which through the latter agent has had its toxicity destroyed there still remains evidence of the capacity of producing immunity.

Annales de Dermatologie (Paris), April.

Potassium Permanganate in Lupus. HALLOPEAU.—Four patients were treated with potassium permanganate applied as a dry powder or in a 2 per cent. solution. The lupus was rapidly improved and the lesions healed. Hallopeau believes that besides the caustic action, the permanganate has also something of a specific effect on lupus. He suggests that it might be advisable as a preliminary measure to phototherapy, but Finsen has stated that phototherapy has much better chances of success when the lupus has not been treated before with other measures. Leredde believes that the better the results from the treatments which merely "improve" without effecting a radical cure, the more dangerous for the patient, as in the case of carcinoma.

New Chemico-Electric Treatment of Lupus. DANLOS.—For three years Danlos has been experimenting to derive electricity for the treatment of lupus directly from chemical action. He finally succeeded in producing what he sought by a combination of a saturated solution of copper sulphate and pulverized zinc. The zinc is stirred into the copper fluid until the color changes. The result is a limpid fluid—a solution of zinc sulphate—and a black sediment consisting of zinc and copper. This sediment is washed clean and is the substance applied to the lupus in the form of a salve, with a compressing bandage above, until the lupus is destroyed. The sound skin is not affected by the electro-chemical action of the metals and after the lupus is eaten out, cicatrization proceeds normally under the salve. Usually the application does not cause pain, but if there is much ulceration there may be severe pain and tumefaction. He has applied this method of treatment to twenty patients with most satisfactory results in every case of tubercular lupus. He considers it almost the equal of Finsen's phototherapy and a good substitute therefor when circumstances render the latter impossible. When the lupus affects the natural orifices phototherapy is the only resource, but on extensive, flat surfaces Danlos' method will be found much more rapid and fully as effective, and it is within the reach of every practitioner. The curette and a concentrated solution of zinc chlorid are preferable, perhaps, for very extensive, deep lesions, unless the patients shrink from the curette, as often happens.

Simplified Finsen Apparatus for Phototherapy. GASTOU. Two professors at Lyons, Lortet and Genoud, have devised an apparatus to take the place of Finsen's complicated electric light arrangement for the treatment of lupus. They first spent weeks at Copenhagen studying Finsen's plant, and by approaching the source of the electric light to within two or three centimeters of the radiator and suppressing other mechanism, they have succeeded in producing an apparatus which generates the active rays as effectively as Finsen's while it requires no more than the ordinary electric light power and has a much larger photochemical zone of action. Leredde reports after six months of constant experience with this new apparatus that it is a revolution in the treatment of cutaneous affections by the chemical rays, as it brings phototherapy within the reach of every physician who has access to an electric light service. Ten to 12 amperes are ample, while Finsen uses 60 to 80. The time of exposure is fifteen minutes instead of the hour required by Finsen, and four patients can be treated at the same time. As the surface exposed can be much larger, the number of applications can be correspondingly reduced. The apparatus consists of an arc lamp of 10 to 12 amperes, a compressor of rock crystal and an interposed vessel, in both of which there is a double circulation of water. A sheet of tin is placed between the two latter, in which an aperture is cut exactly the size and shape of the lesion to be treated.

Annales d. Mal. d. Org. Gen.-Urin. (Paris), April.

Preservation of Genital Function After Resection of the Epididymis. SCADUTO.—After resection of the epididymis is it possible to restore the function of generation by establishing a new route for the spermatozoids? Scaduto replies in the affirmative to this question as the result of successful experimentation on dogs. He found that an anatomic and functional anastomosis between the vas deferens and the mediastinum of the testis could be readily accomplished, thus re-establishing the route destroyed by resection of the epididymis. His experiments on large dogs were more successful as the size and shape of the testicles resembled more the human organ. The result in one dog was a complete success, spermatogenesis continued normal and the new canal allowed the passage of the spermatozoids. Some of the other dogs escaped and in others the new canal was not entirely permeable. The conditions are much more favorable for the operation in man, he observes in conclusion.

Calculi in the Prostate. C. PASTEAU.—Urinary calculi are frequently found in the prostate and may develop in the prostatic portion of the urethra or its diverticula, or find their way from the upper urinary passages. There is another variety of calculi which develop in the prostate itself, true prostatic calculi, which owe their existence to some attenuated infection of the gland. Ten specimens are illustrated.

Oxycyanid of Mercury in the Urethra and Bladder. L. GENOUVILLE.—With the sole exception of the abortive treatment of gonorrhea, the oxycyanid of mercury is at least fully as effective as potassium permanganate in treating gonorrheal affections, and is decidedly superior to it in the tolerance displayed by patients. It is not a specific for gonorrhea, but is

more effective than other drugs and deserves more general appreciation. A 1 per 1000 solution is the average strength, but 1 per 500 is useful in certain cases.

Bulletin de l'Acad. de Med. de Paris, May 14.

Musical Sensations in Surgical Anesthesia. J. V. LABORDE.—A Paris dentist, Drossner, called Laborde's attention to the fact that as his patients succumbed to the influence of an anesthetic he had noticed that the hallucinations were invariably connected with the sounds from the street below. The auditory sensations seem intimately connected with the anesthetic sleep, and the idea occurred to him to substitute for the discordant, terrifying sounds of the street, harmonious, musical sounds. He arranged a musical phonograph with a receiver for each ear. As the patient took his seat the receivers were placed in his ears and the nitrogen gas administered while he could hear nothing but the music from the phonograph. The operation terminated, the patient rouses himself with none of the hallucinations from the street noises, but calm and cheerful as before, and says that he has heard and felt nothing except the music. Patients return for a second operation, if necessary, with none of their previous apprehensions, declaring that they have nothing but an agreeable musical memory of the previous operation.

Bulletin Medical, Paris, April 13.

Renal Insufficiency in the Aged Revealed by the Respiration. MEYER.—When an elderly person is being palpated and examined generally, the respiration is more or less voluntary and normally regular. But when he is at rest, if the sphygmograph is applied and the respiration becomes automatic, the tracings frequently reveal an unsuspected tendency to an attenuated Cheyne-Stokes character. Incipient renal insufficiency can thus be determined and impending symptoms averted.

Bulletin de la Soc. Med. des Hop. de Paris, May 16.

Epidural Analgesia in Treatment of Visceral and Intercostal Pain. WIDAL.—Sicard's announcement in regard to the value of epidural cocainization as a means of curing the pain of sciatica, lumbago, etc., has been fully confirmed by Widal's experience. The pain is arrested at once and usually permanently. In a few cases the pains recurred after a few hours, but always much less severe. The intense pain in the stomach accompanying an ulcer, with violent exacerbations following the ingestion of even one swallow of milk, was completely cured in one case in ten minutes. The patient could rise, eat and attend to her duties, free from pain. This analgesia has persisted six days to date. A single injection of 2 cg. of cocain in another case in which the patient had been a victim of severe sciatica without respite from the pains for six months, resulted in the immediate banishing of the pain. The cocain is injected into the epidural space, external to the meninges, inserting the needle through the sacrococcygeal ligament, between the two small knobs of the apex of the sacrum. The injection is simple and harmless. The analgesia induced is not sufficient for surgical intervention but proves ample for therapeutic purposes.

Progres Medical (Paris), May 11.

Hydrosulphuric Acid in Smallpox. NOKOWSKI.—Several cases are described to demonstrate the benefits of rectal injection of an aqueous solution of hydrosulphuric acid in smallpox. The dose varies from 10 mg. to 10 cg., according to age. In forty to fifty cases the complete development of the pustules and suppuration occurred the third or fourth day and the scabs dropped off the eighth to the tenth. Some of the patients were cured on an average of five days, with large doses. The most serious case was treated with four injections a day for five days and was cured in eight. The acid transforms aerobic into anaerobic micro-organisms, which alters them in various ways and apparently renders them harmless. It is interesting, Nokowski adds, to see how the eruption spares the abdomen and neighboring regions after these injections are made, as if a local protection were thrown around this zone.

Revue Mens. des Mal. de l'Enfance (Paris), May.

Diagnostic Value of Leucocytosis in Measles. RENAUD.—A hyperleucocytosis commences with the infection, and attains its maximum eight to nine days before the exanthem appears, that is, four to five days before the contagious period. If the leucocytosis is found normal a supposed contagion is a mistake. The diagnosis is correct if the number of leucocytes is found increased with no other plausible reason for the increase. In one observation, for example, the leucocytes were 16,200 more than the normal number, and of these 13268 were polynuclears.

Pathogenesis of Night Terrors. J. G. REY.—The cause of the so-called night terrors is always some obstacle to respiration and hematosis, either direct or reflex. Both are due to slow, protracted intoxication with carbon dioxid.

Berliner Klinische Wochenschrift, March 25.

Treatment of Varicose Phlebitis. KAREWSKI.—A small incision at the fossa ovalis exposes the saphena vein, which is divided betwen two ligatures. The vein is then isolated downward and detached from its bed in the subcutaneous fat. Another incision is then made 20 cm. lower down and the vein is again divided between two ligatures, when the entire trunk between these incisions can be pulled out. The side branches bleed as this is done, but this bleeding is always easily checked by brief compression. A third incision at the knee allows more of the vein trunk to be resected if necessary. After this, the varices are extirpated in turn. By this technique a long wound is avoided and scar formation is reduced to the minimum. It is peculiarly adapted to fresh varicose phlebitis. Six patients thus treated were restored to their occupations in a surprisingly brief time.

April 1.

Prognosis of Brain Disease in Childhood. H. OPPENHEIM.—Six years ago Oppenheim described a cerebral affection in children—acute hemorrhagic encephalitis—which usually terminates in complete recovery. He now describes another affection, the symptoms of which simulate a tumor in the motor zone, and yet it can be considered curable, the patient rapidly recovers under iodin, bromid or other measures. The same symptoms in an adult would suggest a syphilitic neoplasm or syphilitic meningo-encephalitis: the Jacksonian epilepsy, monoplegia, motor aphasia, headache, vomiting, slightly retarded pulse and disturbances in sensibility, with the protracted course and the absence of fever. There were no syphilitic antecedents in any of the six cases he describes, and all recovered with no recurrence during the five to six years since. A tendency to local spasms persisted in one patient for a time, but this, too, finally disappeared. He is inclined to consider the affection a tubercular meningo-encephalitis—the "meningite en plaque tuberculeuse" studied by Chantemesse on adults who had died from general tuberculosis or other diseases, that is, only in its severer, fatal and complicated forms, never in children. He found it always limited to the vicinity of the fissure of Rolando. Oppenheim's six little patients, therefore, must have had and recovered from either a hitherto undescribed, chronic, non-suppurative encephalitis, or some yet unknown brain affection, exhibiting the symptoms of a cerebral tumor in the motor zone, or else this "meningite en plaque tuberculeuse."

April 22.

The Freezing Point of the Blood in Diagnosis. A. VON KORANYI.—When the kidneys are working normally the freezing-point of the blood varies between 0.56 and 0.58 C. If the freezing-point is at 0.59 it is evidence of renal insufficiency, that is, of a disturbance in the functions of both kidneys, in the absence of acetonuria and of interference with the respiration. The disturbances in the renal function may be of reflex origin, caused by pain in one kidney, while the other may be sound. There is also a **mechanical renal insufficiency**, due to compression of a kidney by a tumor anywhere in the abdominal cavity. Both the reflex and the mechanical forms of renal insufficiency must be excluded, of course, before assuming the existence of a bilateral kidney affection from the variation in the freezing-point of the blood. Other writers claim that the normal range of the freezing-point is from 0.56 to 0.60, but Koranyi shows that their results are erroneous, owing to their

failure to eliminate all the carbon dioxid in the blood, which is an indispensable preliminary to determining the freezing-point for diagnostic purposes. It is easily accomplished by shaking it up with oxygen or even with ordinary air. The oxygen is more effectual. The freezing-point of the blood is normal or subnormal in typhoid fever in the absence of renal complications, and when the increased amounts of carbon dioxid in case of severe bronchitis are removed. It is impossible to determine the freezing-point with accuracy with less than 10 to 15 c.c. of blood. It is unnecessary to separate the serum, as the freezing-point of the blood and the serum is the same. Beckmann's apparatus is the only one to use and the directions accompanying it should be scrupulously followed. Fifteen minutes are ample for the test and even with an error of .01 it is sufficiently accurate for all practical purposes. (See THE JOURNAL, p. 475.)

May 6.

Alkaline Treatment of Pernicious Anemia. T. RUMPF.—Comparative investigation of the blood in a number of cases of pernicious anemia, other affections and in health, demonstrated that in pernicious anemia the blood contains an exceptional amount of water and chlorin, while it is very deficient in potassium and iron. If pernicious anemia is due to an excessive destruction of blood corpuscles and a relative insufficiency of the blood-forming organs, as some maintain, it is possible that the resulting toxic substances in the blood may have an affinity for the potassium found normally in the corpuscles. As the potassium is attracted out of the corpuscles by this affinity, destruction of the corpuscles may be the direct result. The same affinity may also draw out the potassium from other portions of the body and prevent its assimilation, and certain clinical facts sustain this hypothesis. The inference follows that the administration of potassium might arrest or favorably influence the course of this disease. Rumpf, reasoning from these premises, applied this treatment in four cases of progressive pernicious anemia, and reports that each patient was improved to the point of actual recovery in consequence. His formula was: potassium bicarbonate and ferratin, each .5 gm. a day, or a combination of quinin hydrochlorate .2, ferratin .5 and potassium tartrate and potassium citrate, each .75. In four other more advanced cases the anemia progressed to a fatal termination unchecked. It is therefore not a specific, but the results attained certainly justify further attempts in the treatment of pernicious anemia with easily assimilated potassium.

Dermatologisches Centralblatt (Berlin), May.

Success of Refrigeration in Treatment of Ulcus Molle. F. V. POOR.—Spraying the ulcer with methyl ethyl or ethyl chlorid—kelene—proved the most effective means of curing ulcus molle in Poor's experience. He states that twenty-five cases thus treated healed like an aseptic wound in ten to twelve days with an entire absence of complications of any kind. He applies the spray for one to one-and-a-half minutes a day until the suppuration ceases and then heals the lesion with the usual antiseptics, iodoform, dermatol or airol. He concludes that the brief, repeated refrigeration of the tissues has a destructive action on certain bacilli, especially Ducrey's, or at least checks their development by the hyperemia produced. The cure is much more rapid and complications are prevented by this method of treatment.

Zeitschrift f. Hygiene u. Infect. (Leipsic), April.

Diphtheria Bacilli in Convalescents. H. PRIP.—Careful search was made for the bacilli in 100 convalescents from diphtheria who returned every week for months after their dismissal. In 25 per cent. the bacilli vanished before the false membranes. The bacilli were found in 60 of the convalescents: in 3 after twenty-two, eleven and eight months; in 2 after five months; in 5 after four; in 6 after three and in 11 after two months. A large number failed to return after the second month. In 18 convalescents the bacilli reappeared after an absence of one to three weeks and then vanished again. In 5 the bacilli suddenly made their appearance in the nose and persisted one to four weeks before they finally vanished. The nose had not been involved in the diphtheritic process in any of these cases. In one case complicated by otitis media, virulent bacilli were found seventy-three days after the membranes had disappeared. None of the patient's numerous children contracted the disease. In three instances infection of other members of the family followed the return of the convalescent. The dismissal occurred after two culture tests had resulted negatively on two consecutive days. Prip asserts that no patient should be declared free from bacilli until after months of examination of all the cavities communicating with the throat.

Zeitschrift f. Heilkunde (Vienna), March.

Auto-Enteroplastic Surgery.—TRNKA.—The skin is the best substitute for the mucous coat and walls of the intestines, as has been long established. The only flap that ensures absolute solidity to the resistance of the abdominal pressure is a bridge flap containing muscle. Trnka operated on a young man, according to these principles, closing a large ragged defect near the iliac fossa, resulting from a typhlitic perforation. He first cut a slightly curved bridge flap above it, including a portion of the rectus muscle. The inner edge was sutured to the edges of the intestine and the flap isolated in silk for two weeks. A semicircular flap was then cut below the primary defect, with which its base was parallel. This flap was then turned over and drawn through beneath the bridge flap. The defect was thus closed with a skin flap, held in place and reinforced by a strong bridge flap, and the results have demonstrated the great solidity and permanence of the plastic operation.

Zeitschrift f. Klinische Med. (Berlin), xxiii, 5 and 6.

Laceration of Cardiac Valve by External Violence. F. STRASSMANN.—The aorta is involved in two-thirds of the rare cases of traumatic laceration of a valve. Symptoms may appear at once, or months or years may intervene. The physical signs are the same as for a spontaneous valvular affection but the murmur is frequently longer, stronger and has a peculiar tone. There is no compensation in these cases and death usually follows in one to three years, but 2 instances have been known of survival for ten, 1 for eleven and 1 for fifteen years, and there are a few cases of complete recovery on record. In Strassmann's case a robust man was kicked in the ribs by a horse. Two were fractured; the aorta and one of its valves were torn and a chronic pericarditis developed.

Bactericidal Action of Bile. S. TALMA.—This article asserts as the conclusion of much research, that the bile contains a substance which checks the development of most of the colon, typhoid and diphtheria bacilli. The susceptibility of different bacteria varies and their virulence is not synonymous with the power of producing infection in the biliary passages. The bactericidal power of the bile varies at different times and with different animals. The epithelium of the biliary passages and the liver cells offer a powerful resistance to the invasion of micro-organisms, especially to diphtheria bacilli.

Acute Articular Rheumatism and Trauma. R. BERNSTEIN.—The connection is evident between a traumatism and the development of acute articular rheumatism in the seven cases described. An infected wound in a joint may cause pyemia, but articular rheumatism was never known to result from such an injury. Pyemia may likewise follow a skin wound, and exceptionally, articular rheumatism may result. Subcutaneous injuries are very rarely followed by pyemia while they have frequently been noted in the immediate antecedents of acute articular rheumatism. The incubation is comparatively brief and the trauma can not be incriminated if more than two weeks elapse before the appearance of the articular rheumatism.

Grece Medicale (Syra), April.

Pathogenesis and Treatment of Albuminuria. KELAIDITIS.—Two factors co-operate in the production of every albuminuria: 1, the antitoxic insufficiency of the liver, and 2, the irritating action on the kidneys of the exogenous organic and microbian poisons eliminated without having undergone any preliminary transformation in the liver. Whenever from any cause the antitoxic function of the liver is diminished or the amount of toxins is too large for it to manage, then there is hepatic insufficiency, and the untransformed toxins, as they

are eliminated by the kidneys irritate and injure these organs. The first indication in treatment is to restrict the patient exclusively to a milk diet, and Kelaiditis supplements this by administering liver extract to substitute the deficient liver function. He reports very encouraging results from this combination, although his experience has been limited to two patients with Bright's disease, one with glycosuria and three with tuberculosis.

Uncontrollable Vomiting of Pregnancy Cured by Suggestion. TRIANTAPHYLLIDES.—A woman of 30 had suffered from uncontrollable vomiting during her two last pregnancies, and it has been arrested only by premature delivery. The vomiting occurred again with another pregnancy, but Triantaphyllides performed a sham abortion, gave her some bread pills and the vomiting ceased as she was convinced the pregnancy was terminated.

Upsala Laekarefoerenings Foerhandlingar, April.

Acute Suppurative Peritonitis. K. G. LENNANDER.—Any disturbance in the circulation or slight enteritis, may allow the microbes in the intestines to penetrate into the walls and pass thence into the blood or the lymphatics under the serosa. All varieties of solid and fluid exudates may be found in a single abdominal cavity. Peritonitis is the result of the reaction of the organism to the infection. The greater the amount of fluid exudate, the greater the dilution of the toxins and the less they are absorbed. Bacteriologic investigation of the urine is useful in peritonitis as the microbes causing it usually find their way also into the bladder. The rectal temperature is always much higher than the axillary in this variety of peritonitis. Lennander recommends the subcutaneous injection of .75 to 1 cg. of morphin and local anesthesia while the skin and aponeurosis are being incised, then ether or chloroform while the peritoneum is being opened and the cavity examined. The ether or chloroform is then suspended while the intestines are being resected or sutured, as the abdominal viscera and their peritoneum do not possess any pain-nerves. The anesthetic is resumed while the intestines are being replaced and the tampon or drain inserted. The incision must never include any motor nerves. Every effort should be made to recognize the phases of the infection and inflammation of the serous membrane preceding perforation, so as to forestall the latter. In all cases of paralysis of the ileum, a temporary fistula should be made in the cecum, inserting and fastening a drain, and in general peritonitis, in which paralysis of the intestines is threatened, the cecum should be arranged between tampons so that it can be opened at a moment's notice if the tension of the abdominal wall increases. In the after-treatment, saline infusion is extremely important, subcutaneous if the heart action is good and otherwise, intravenous. As the peritoneal cavity is a great lymph-pace, copious saline infusion, he thinks, increases the secretion of lymph in it, dilutes the toxins in unoperated cases, and after operation, drains the cavity much more effectively, sweeping the toxins away. He injects 1200 to 2000 c.c. in two portions during the day. Opium he administers by the rectum, about 5 cg. in a suppository. The relief from pain enables the patient to lie still on his back, which favors recovery. Local application of ice is also useful. If the patient is hungry he injects 100 to 175 c.c. of olive oil under the skin. Every case in which there is reasonable certainty of an abscess or contusion should be operated on. To prevent thrombosis in the lower extremities, he raises the foot of the bed 10 to 40 cm.

Bacterial Endocarditis. S. E. HENSCHEN.—Three cases of endocarditis of bacterial origin are described. One patient was a girl of 12 who had passed through an acute urinary infection two years before. The acute endocarditis of the aorta developed consecutive to tonsillitis, and the staphylococcus albus was found in the cerebrospinal fluid during the acute stage. The diagnosis was dubious at first, suggesting typhoid and then meningitis. There were no symptoms of articular rheumatism. The case terminated in comparative recovery, the third case of endocarditis on record in which recovery occurred after invasion of the blood by bacteria. It is the only one in which the staphylococcus was found. In his second case a typical articular rheumatism and chorea were accompanied by endocarditis and pure cultures of the staphylococcus albus were derived from the blood, pleuritic effusion and the fluid in the joints. The rheumatism and chorea he is inclined to attribute to the action of the bacterial toxins. The patient was a boy of 12, with a history of a first attack of articular rheumatism two years previously. He died eight days after the acute endocarditis developed. The third patient was a man of 48, healthy until June, 1899, when he contracted a cold and evidences appeared of an intestinal infection, chills, persistent diarrhea and vomiting. These symptoms gradually subsided but recurred again in December and he entered the hospital in January. The diagnosis from the symptoms then presented was ulcerative endocarditis and septicemia, with aortic insufficiency and acute dilatation of the heart. Acute nephritis and bronchitis followed, and patient died in February. The colon bacillus was derived pure from his blood during the first weeks in the hospital, but after the administration of salol and salicylic acid, a similar, but non-motile bacillus was found in its place and toward the last, the streptococcus. This case demonstrates anew the possibility that an intestinal infection may spread to involve the endocardium and cause an ulcerative endocarditis of a comparatively chronic course. There are very few similar cases in the literature—not more than four and some of these are dubious. None of the cases published indicate that the colon bacillus infection has any peculiarly characteristic features.

The Iodipin Test of the Functions of the Stomach. O. V. PETERSSON.—The iodipin test was tried on nearly fifty persons to investigate the motor function of the stomach, determining the reaction in the saliva with nitric acid and chloroform. The other usual tests were also applied to control the results, ascertaining possible retention of the stomach contents with the sound. In every instance it was found that when the stomach emptied itself normally, the iodin reaction was evident in thirty minutes on an average. In gastric affections with normal motor function, the reaction was also prompt, but in every case in which the existence of more or less retention was ascertained by sounding the stomach, the iodin reaction was correspondingly retarded or did not occur at all. It was pronounced in three cases of carcinoma in 45 minutes; in two others in 90 minutes, and in one case not even after four and a half hours.

Brazil-Medico (Rio de Janeiro), April 22.

Cold Baths in Yellow Fever. A. FERRARI.—Three months of experience with cold baths in the treatment of yellow fever have convinced Ferrari of their great efficacy. The mortality was reduced to 39.45 per cent. and 63 out of the 104 patients thus treated left the hospital completely cured in ten to fifteen days. He administers strontium lactate as the best means of controlling the albuminuria, in the dose of 2 to 4 gm. a day. Rectal injection of water at 15 C. is also a valuable hydrotherapeutic measure, promoting diuresis and lowering the temperature.

Queries and Minor Notes.

MEDICAL PRACTICE ACT.

NEW BUFFALO, MICH., May 24, 1901.

To the Editor:—Will you please inform me what states recognize the certificates of the Michigan State Board of Registration in Medicine as fulfilling all requirements for a certificate to practice in the particular state? H. D. R.

ANS.—We can not say what states recognize the certificates of others, as it is a matter which is regulated by each board of examiners or registration and no published statement of their rules is available. It is safe to say, however, that there are comparatively few states under the present laws that recognize the certificates of other states.

QUESTION OF ETHICS.

SUMMIT STATION, OHIO, June 3, 1901.

To the Editor:—Would it be ethical for a regular physician to consult with a physician who has graduated from a regular school and afterwards taken a course in homeopathy, and who now claims to practice either, according to the patient's desire? C. H. W.

ANS.—We should say not, according to the spirit of the Code.

Books Received.

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, for the Use of Students and Practitioners. By James Nevins Hyde, A.M., M.D., Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College, and Frank Hugh Montgomery, M.D., Associate Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College. Sixth and Revised Edition. Illustrated with 107 Engravings and 27 Plates in Colors and Monochrome. Cloth. Pp. 828. Price, $4.50. Philadelphia and New York: Lea Brothers & Co. 1901.

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS. A Practical Exposition of the Methods, Other than Drug-Giving, Useful in the Treatment of the Sick. Edited by Solomon Solis-Cohen, A.M., M.D., Professor of Medicine and Therapeutics in the Philadelphia Polyclinic; Volume XI, Electrotherapy, by George W. Jacoby, M.D., Consulting Neurologist to the German Hospital, New York City; in two books: Book II, Diagnosis; Therapeutics. Illustrated. Cloth. Pp. 323. Eleven volumes. Price, $22 net. Philadelphia: P. Blakiston's Son & Co. 1901.

A TREATISE ON ORTHOPEDIC SURGERY. By Royal Whitman, M.D., Instructor in Orthopedic Surgery and Chief of the Orthopedic Department of the Vanderbilt Clinic in the College of Physicians and Surgeons of Columbia University. Illustrated with 447 Engravings. Cloth. Pp. 650. Price, $5.50 net. Philadelphia and New York: Lea Brothers & Co. 1901.

COAKLEY ON THE NOSE AND THROAT. The Diagnosis and Treatment of Diseases of the Nose, Throat, Naso-Pharynx and Trachea. For the Use of Students and Practitioners. By Cornelius G. Coakley, M.D., Professor of Laryngology in the University and Bellevue Hospital Medical College, New York. Second edition. 103 Engravings and 4 Colored Plates. Cloth. Pp. 556. Price, $2.75 net. Philadelphia and New York: Lea Brothers & Co. 1901.

APPENDICITIS: ITS PATHOLOGY AND SURGERY. By Charles Barrett Lockwood, F.R.C.S., Assistant Surgeon and Lecturer on Descriptive and Surgical Anatomy in St. Bartholomew's Hospital. Cloth. Pp. 287. Price, $2.50. London and New York: MacMillan & Co. 1901.

HEALTH AND HYGIENE FOR THE HOUSEHOLD. By John Joseph Nutt, B.L., M.D., Member of the American Medical Association. Cloth. Pp. 69. Price, 50 cents. New York: The Abbey Press.

TRANSACTIONS OF THE TWENTY-SECOND ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION. Held in the City of Washington, D. C., May 1, 2 and 3, 1900. Cloth. Pp. 235. New York: Carey Printing Co. 1901.

THE EXTRA PHARMACOPEIA. By William Martindale, F. L. S., F. C. S., Late President and Examiner of the Pharmaceutical Society, and W. Wynn Westcott, M. B. Lond., D.P.H., Coroner for Northeast London. Tenth Edition. Cloth. Pp. 688. Price, 10 shillings, 6 pence. London: H. K. Lewis. 1901.

PROCEEDINGS OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY. April. Paper. Pp. 56. Price, 15 cents per copy. Philadelphia: Published by the Society.

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF PHILADELPHIA. May. Paper. Pp. 35. Published by the Society. 1901.

ANNUAL REPORT OF THE BOARD OF HEALTH OF THE CITY OF WINONA, MINN., for the Year Ending March 31, 1901. Paper. Pp. 10. Winona, Minn.: Joseph Leicht Press.

EIGHTH ANNUAL REPORT OF THE STATE CHARITIES AID ASSOCIATION to the State Commission in Lunacy. November 1, 1900. Second Edition. Paper. Pp. 27. New York: United Charities Aid Association.

EIGHTEENTH REPORT OF THE STATE BOARD OF HEALTH OF WISCONSIN, September 30, 1900. Paper. Pp. 289. Madison, Wis.: Democrat Printing Co. 1901.

The Public Service.

Army Changes.

Movements of Army Medical Officers under orders from the Adjutant-General's Office, Washington, D. C., May 23-29, 1901, inclusive:

Thomas C. Chalmers, major and surgeon, Vols., leave of absence from the Department of California extended.

Matthew A. DeLaney, contract surgeon, member of a board at Fort Monroe, Va., vice Contract-Surgeon Charles N. Barney relieved, to examine enlisted men for commissions.

Euclid B. Frick, captain and asst.-surgeon, U. S. A., member of a board at San Juan, P. R., to examine officers of the Army as to their fitness for promotion.

Herbert W. Hatch, contract surgeon, from the Department of Alaska, to San Francisco, Cal., for annulment of contract.

Louis T. Hess, lieutenant and asst.-surgeon, U. S. A., from the General Hospital, Presidio of San Francisco, Cal., to duty at the General Hospital, Fort Bayard, N. M.

Francis J. Ives, major and surgeon, U. S. A., member of a board at Fort Sheridan, Ill., to examine officers of the Army as to their fitness for promotion.

William R. S. Jones, contract surgeon, member of a board at San Juan, P. R., to examine officers of the Army for promotion.

William P. Kendall, major and surgeon, U. S. A., now in New York City, to proceed to Washington, D. C., on official business and thence to Fort Slocum, N. Y.

B. Albert Lieberman, major and surgeon, 33d U. S. Infantry, honorably discharged from the service of the United States, his regiment having been mustered out.

Charles B. Mittelstaedt, contract surgeon, from San Francisco, Cal., to Fort Ethan Allen, Vt., for post duty.

Arthur B. Smith, contract surgeon, from the General Hospital, Fort Bayard, N. M., to Ravenna, Ohio, for annulment of contract.

Frederick H. Sparrenberger, captain and asst.-surgeon, Vols., leave of absence from the Department of California extended.

Frank P. Stone, contract dental surgeon, from Washington, D. C., via San Francisco, Cal., to Manila, P. I., for assignment in the Division of the Philippines.

Samuel S. Turner, contract surgeon, member of a board at Fort Sheridan, Ill., to examine officers of the Army for promotion.

Navy Changes.

Changes in the Medical Corps of the Navy for week ended June 1, 1901:

Dr. J. H. Iden, appointed asst.-surgeon in the Navy, from May 4, 1901.

Medical Director W. S. Dixon, commissioned medical director from April 28, 1901.

Medical Inspector C. G. Herndon, commissioned medical inspector from April 28, 1901.

P. A. Surgeon E. V. Armstrong, detached from *Vermont*, and ordered to Key West Naval Station for duty at Dry Tortugas.

Asst.-Surgeon T. M. Lippitt, ordered to the Washington Navy Yard, June 1.

Asst.-Surgeon R. B. Williams, detached from duty at Dry Tortugas, and ordered home to be in readiness for sea duty.

Asst.-Surgeon J. H. Iden, ordered to Naval Hospital, Chelsea, Mass., for duty.

P. A. Surgeon J. F. Costigan, detached from the *Yorktown*, and ordered home. Resignation to be accepted after arrival.

Asst.-Surgeon W. M. Garton, detached from the Washington Navy Yard, June 1, and ordered to the *Indiana*.

Asst.-Surgeon H. O. Shiffert, ordered to the *Nashville*.

Asst.-Surgeon E. Thompson, ordered to the *Solace*.

Asst.-Surgeon R. K. McClanahan, ordered to the *Culgoa*.

Pharmacist J. Cowan, detached from the Manila and Cavite Naval Station and ordered to Naval Hospital, Yokohama, Japan.

Health Reports.

The following cases of smallpox, yellow fever and plague have been reported to the Surgeon General, U. S. Marine-Hospital Service, during the week ended June 1, 1901:

SMALLPOX—UNITED STATES AND INSULAR.

California: San Francisco, May 11-18, 5 cases.
Illinois: Chicago, May 18-25, 7 cases.
Iowa: Clinton, May 18-25, 2 cases.
Louisiana: May 18-25, New Orleans, 7 cases, Shreveport, 1 case.
Maryland: Baltimore, May 18-25, 2 cases.
Massachusetts: May 18-25, Boston, 3 cases; Fitchburg, 1 case; Marlboro, 1 case; New Bedford, 2 cases.
Michigan: Detroit, May 18-25, 67 cases.
Minnesota: Minneapolis, May 18-25, 9 cases; Winona, May 11-18, 1 case.
Nebraska: Omaha, May 11-18, 9 cases.
New Hampshire: Manchester, May 18-25, 5 cases.
New Jersey: May 18-25, Camden, 1 case; Newark, 2 cases, 1 death; Passaic, 1 case.
New York: New York, May 18-25, 134 cases, 13 deaths.
Ohio: Cincinnati, May 17-24, 4 cases; Cleveland, May 18-25, 39 cases, 1 death.
Pennsylvania: May 18-25, Erie, 1 case; Lebanon, 8 cases; Philadelphia, 3 cases; Williamsport, 1 case.
Tennessee: May 18-25, Memphis, 6 cases, 2 deaths; Nashville, 2 cases.
Utah: Salt Lake City, May 11-18, 5 cases.
Washington: Tacoma, May 12-19, 1 case.
West Virginia: Huntington, April 13-May 24, 48 cases.
Wisconsin: Green Bay, May 19-26, 6 cases.
Philippine Islands: Manila, March 23-April 13, 35 cases.
Porto Rico: Ponce, April 27-May 4, 5 cases.

SMALLPOX—FOREIGN.

Austria: Prague, April 27-May 4, 3 cases.
Brazil: Rio de Janeiro, April 1-15, 5 deaths.
Belgium: Antwerp, April 27-May 4, 5 cases, 2 deaths.
China: Hongkong, April 6-13, 6 cases, 6 deaths.
Ecuador: Guayaquil, March 30-May 11, 3 deaths.
Egypt: Cairo, April 15-May 16, 4 deaths.
France: Paris, April 27-May 4, 5 deaths.
Gibraltar: May 6-12, 2 cases.
Great Britain: England—Liverpool, May 4-11, 2 cases; London, May 4-11, 1 case. Scotland—Dundee, April 27-May 11, 10 cases; Glasgow, May 3-11, 4 deaths.
Italy: Naples, April 30-May 12, 296 cases, 57 deaths.
Mexico: Mexico, May 11-18, 1 case.
Nicaragua: May 16, Grenada, present; Masaya, present; Managuas, present.
Russia: Moscow, April 21-27, 9 cases, 2 deaths; Odessa, April 27-May 4, 5 cases, 2 deaths; St. Petersburg, April 20-May 4, 21 cases, 4 deaths; Vladivostock, Oct. 1-31, 1 case; Warsaw, April 20-27, 7 cases.
Spain: Malaga, May 4-11, 1 death; Valencia, April 27-May 11, 2 deaths.
Straits Settlements: Singapore, March 30-April 13, 3 deaths.
Uruguay: Montevideo, March 16-23, 5 cases.

YELLOW FEVER.

Brazil: Rio de Janeiro, April 1-13, 31 deaths.
Colombia: Panama, May 6-20, 7 cases.
Cuba: Havana, May 11-18, 3 cases.

PLAGUE—INSULAR.

Philippine Islands: Cebu, April 4, 1 case; Manila, March 23-April 13, 76 cases, 64 deaths.

PLAGUE—FOREIGN.

Japan: Formosa, April 21-28, 170 cases, 111 deaths.
Turkey: Baara, May 13, 3 cases.